THE TIMES
Higher Education
SUPPLEMENT

Research should go to 'centres with potential'

by Judith Judd

Universities' scientific research should be concentrated on those centres with the greatest potential for progress, Lord Todd, president of the Royal Society, said this week.

In his anniversary address to the society he said that this was not an argument for so-called "big" science. It was simply a recognition that where funds were not unlimited, choices should be made on the quality and promise of people in particular fields of science and on the likely pattern of demand for scientific manpower.

Lord Todd spoke of the serious danger that universities might be unable to recruit and retain the talented young teachers and research workers on whom their health and survival depended.

"Other countries see their opportunity in our error. In the absence of a real prospect of developing and exercising their talents here who can blame our young scientists if they go elsewhere."

It was to encourage such young people that the society was developing its "elite" fellowships.

Lord Todd said that the universities' training in science and technology for those who are to play a leading role in industry was basically sound. But graduates who did not do research before employment might well benefit from a vocational MSc, he added.

It might also be argued that in the rush to expand university education many people who might have been more appropriately trained in the polytechnics had been sucked into the system. "But although minor changes should and no doubt will be made, I do not think there is anything fundamentally wrong with our university training in science and technology for those who are to play a leading role in industry."

The country's need for more trained scientists and engineers had been superbly met by universities since the expansion in numbers in the 1960s.

In less than a quarter of a century the numbers graduating in science and technology had trebled and the numbers gaining higher qualification in technical subjects had gone up still faster.

Although these people had been trained in institutions where people worried about black holes or bacterial genetics, many had found their way into the productive sectors of the economy. University research should not be dominated by short-term practical or economic objectives, he said.

"It is for this reason that proposals for joint industry university PhD courses or that universities should orient their research to meet specific industrial needs, are, in my view, misguided."

Book calls for comprehensive university

by Peter David

An end to the distinction between polytechnics and universities and the creation of a new system of "comprehensive collegiate universities" is called for in a book published this week.

In *Towards the Comprehensive University* Professor Robin Pedley, professor of education at the University of Southampton, claims that the reform of the university system on comprehensive lines ought to be the logical sequel to comprehensive school reform.

Arguing that the 11-plus bottleneck has today been replaced by one at 18-plus, Professor Pedley goes on: "Although the struggle for the extension of the comprehensive principle to secondary education has indeed been successful, for a new generation the battlefield has shifted from schools to further and higher education.

"For 'grammar schools' now read 'universities'; for 'secondary moderns' read 'colleges of further education'; for 'creamed, sub-comprehensives', which have to live alongside selective grammar schools, read 'polytechnics' and 'colleges of higher education'."

The right course would be to bring together all the institutions of further and higher education in each "natural social area" of Britain in comprehensive universities catering for all kinds of students.

"If we were to take 8,000 full-time and 9,000 part-time students as a likely average, drawn from a local population of 500,000, we should have some 100 comprehensive universities in England and Wales in place of the present unplanned assortment of 34 universities, 30 polytechnics and 44 colleges or institutes of education or higher education."

Reform on these lines need not, according to Professor Pedley, result in "the devastation of existing educational communities, which now lays waste the world of teacher training".

Towards the Comprehensive University by Professor Robin Pedley. Macmillan Books £1.95.

Hopes for phased settlement of lecturers' pay fade

Hopes of a phased settlement of the university teachers' pay anomaly have faded during the latest round of negotiations.

Lecturers had been hoping that this year's settlement would include at least 10 per cent with a promise of steps to right the anomaly at some stage during the next 12 months. However, negotiators have detected a hardening of the Government's attitude in their recent discussions with officials.

It now appears that interpretations of the Government's White Paper, *The Attack on Inflation*, may have been too optimistic. The White Paper says that the Government's pay policy allows for the righting of some anomalies, probably on a phased basis.

Leaders of the Association of University Teachers had hoped that the settlement of this year's pay claim from October 1, widely expected to be around 10 per cent, would be coupled with a promise of the first step towards righting the anomaly in the New Year.

The claim is for an increase of around 16 per cent from October 1 and for increases of between 12 and 16 per cent to right the anomaly.

If nothing is done abou[t the] anomaly within the next 12 [...] university teachers may find [them]selves confronted by yet a[nother] set of Government restrictio[ns on] pay next October.

Informal talks have been [going] on among members of Commi[ttee] which has representatives o[f] lecturers, the university auth[orities] and the Department of Edu[cation] and Science. After a meeting [on] Monday, Mr Laurie Sapper, ge[neral] secretary of the AUT said [that] there was no progress to repor[t].

Dr Cecil Wells, the AUT's p[resi]dent, said that new anomalies we[re] being created all the time as gr[oups] in the private sector broke [the] 10 per cent guidelines which [the] Government was upholding firmly in the public sector. [The] Government had admitted [the] anomaly for years and there w[as] no excuse for delay.

The AUT is hoping that som[e] progress will have been made b[y] the time of their council meeting on December 15-17 but so far there is no indication that this will be so.

One sticking point is the Government's refusal to say what element of the anomaly will be settled b[y] next October.

NUS split on racism issue

The National Union of Students is poised to reverse the controversial policy it adopted three years ago of denying free speech to groups and individuals considered fascist or racist.

At its Blackpool conference this weekend the executive committee intends to put forward a resolution on racialism that would rescind the "no platform" policy which, it says, has alienated many students.

The resolution calls for a national campaign against racialism based on the NUS pledge: "We declare our opposition to all forms of racialism and affirm the democratic right of all students and working people, regardless of race, colour or creed, to study and work without fear of intimidation or discrimination."

But it is expected to be opposed strongly by a number of university and polytechnic student unions who want to continue the "no platform" policy and add a specific ban on speakers from the National Front.

Among the unions supporting the "no platform" policy are those at the universities of Sheffield, East Anglia, Bristol and York. Polytechnics in support include Portsmouth, South Bank, Liverpool and City of London.

A second controversial debate at the conference, which will be addressed tonight by Mrs Williams, the Secretary of State for Education and Science, will be the banning of Jewish societies on the grounds that they are Zionist and therefore racist.

The NUS executive has publicly criticized the small number of unions which have banned or limited the activities of their Jewish societies, and intends to seek an amendment to the NUS constitution enabling member unions which introduce bans to be suspended.

Conference preview page 10

Interviews start for credit transfer director

The appointment of a director to examine the feasibility of a national information centre for credit transfer in further and higher education is expected shortly. A short list of six candidates has been drawn up and interviews are to be held on December 21.

In July the Government announced its intention of setting up a working party to study all aspects of a national credit transfer agency following the news that the Council for National Academic Awards and the Open University had agreed a new credit transfer scheme. Their agreement allows students to transfer to polytechnics and colleges of higher education and vice versa.

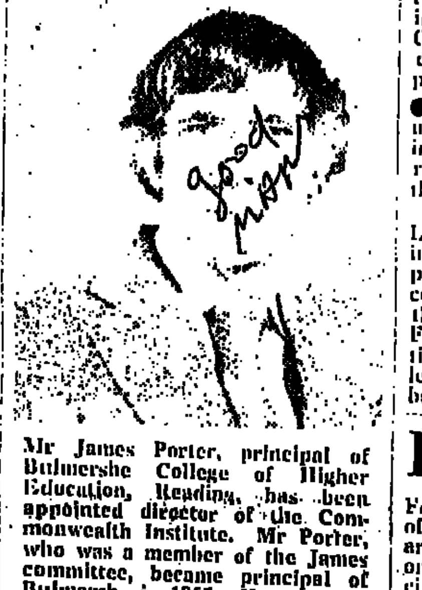
The working party, which has met several times in the past few months, will work with the project director when appointed to investigate the feasibility of a national agency.

The agency's staffing needs, facilities and location will not be decided until consultation can take place with the chosen candidate.

Dr Edwin Kerr, chief officer of the CNAA, who is on the working party, said this week that it was hoped that an appointment would be made "speedily".

He said the intention was to investigate a possible central source of information to which students could turn for advice on changing courses. For those following a more or less traditional academic path—"O" and "A" levels, applying for university and polytechnic places and eventually completing their degrees in the same institutions—there were relatively few problems.

However, for those who wished to change courses, especially in further education, the situation could become more complex.



Mr James Porter, principal of Bulmershe College of Higher Education, Reading, has been appointed director of the Commonwealth Institute. Mr Porter, who was a member of the James committee, became principal of Bulmershe in 1967. He takes up his new post on April 1.

Minister threatens to resign over college's future

A junior Scottish Office Minister is believed to have threatened to resign in a row over the future of Callendar Park College of Education in Scotland.

Scottish Labour MPs say that Mr Harry Ewing, MP for Stirling and Falkirk, was on the verge of resigning as Under Secretary of State for Scotland last week because of the dispute.

Mr Dennis Canavan, Labour MP for West Stirlingshire and convenor of the education committee of Scottish Labour MPs, said this week: "I think it would be a great pity if we were to lose Harry Ewing over this issue because he has worked very hard on it."

The future of three of the country's colleges of education are hanging in the balance at the moment. Callendar Park is in Mr Ewing's constituency and is believed to be particularly vulnerable.

● A Scottish teachers' union is urgently trying to arrange a meeting with Mr Bruce Millan, the Secretary of State for Scotland, before their fate is decided.

Members of the Association of Lecturers in Colleges of Education in Scotland, which represents 90 per cent of the teaching staff in colleges, are hoping to persuade the Minister that Callendar Park in Falkirk, Craigie College of Education in Ayr, and Dunfermline College of Physical Education in Edinburgh should not be closed.

Director sends letter in Liverpool dispute

Liverpool lecturers involved in a dispute over teaching hours have received a letter from the city's director of education asking if they are prepared to resume normal working.

The lecturers, at eight furth[er] education colleges, four colleges [of] education and Liverpool Polytech[nic], have refused to work the 2[3] teaching hours a week demanded by the authority. Instead they ar[e] abiding by the terms of a ne[w] arrangement involving 21 teaching hours.

The National Association of Teachers in Further and Higher Education claims that the authority ha[s] gone back on its word to implement the new agreement from September.

Recently Liverpool City Council voted to dock the pay of those lecturers refusing to work the 23 hours.

In his letter Mr Kenneth Antcliffe outlines the history of the dispute and asks lecturers to indicate whether they have been involved in union action, by how much their teaching time has been reduced and if they will consider a return to normal working.

The NATFHE has now advised its members in Liverpool to tell the director of education that they are working to the prevailing conditions of service. A spokesman for the association said that the overwhelming majority of its members in Liverpool had replied in these terms.

Fears grow over art course

Fears about the future of history of art courses in polytechnics and art colleges have been expressed on the eve of today's one-day Council for National Academic Awards conference on the objectives of art and design degree courses.

There is a "substantial body of concern" among lecturers in history of art departments up and down the country that the subject may lose its "protected" status.

Today's private meeting is expected to be attended by up to 100 representatives of polytechnics, art colleges and the CNAA's own Committee for Art and Design, which advises the main council on policy matters.

At present students studying for all CNAA art and design degrees are required to devote 15 per cent of their course time to the history of art and complementary studies which also receives 20 per cent of the overall exam marks.

However some lecturers believe that the CNAA may be considering dropping the requirement that institutions should devote specific amounts of time and credit to this particular course.

Mr Kenneth McConkey and Mr David Gray, senior lecturers in the history of art at Newcastle upon Tyne Polytechnic, are so concerned about the matter that they have written a discussion document on the future of "Art and Design Courses under the Aegis of the CNAA".

Earlier this week they were hoping to have submitted their analysis to Professor John Steer, chairman of the History of Art and Complementary Studies Board at the CNAA, ready for today's meeting.

Mr McConkey, an executive committee member of the Association of Art Historians, which represents about 900 historians in universities, higher education museums and higher education as a whole, said there appeared to be a threat to the distinct status of the subject which serviced all the other art degree courses.

'Emphasize vocational more'

Economic pressures might compel further and higher education to adopt a more utilitarian and vocational approach, Mr Richard O'Brien, chairman of the Manpower Services Commission warned this week.

"A balance must be struck between the competing interests of academic considerations, the needs of industry and the individual", he said at Birmingham University where he delivered the first Mason Centenary Memorial Lecture.

This would create some imbalances and some individuals would have to recognize that courses they preferred would not necessarily get them the jobs they wanted and hoped for.

Employers, on their side, should not always expect to find graduates with appropriate qualifications ready-made to fill jobs.

NEXT WEEK

Shirley Williams on Robbins and after

Profile of Fernand Braudel

Reading University's new publishing venture

Margaret Boden on artificial intelligence

Two pages of anthropology book reviews

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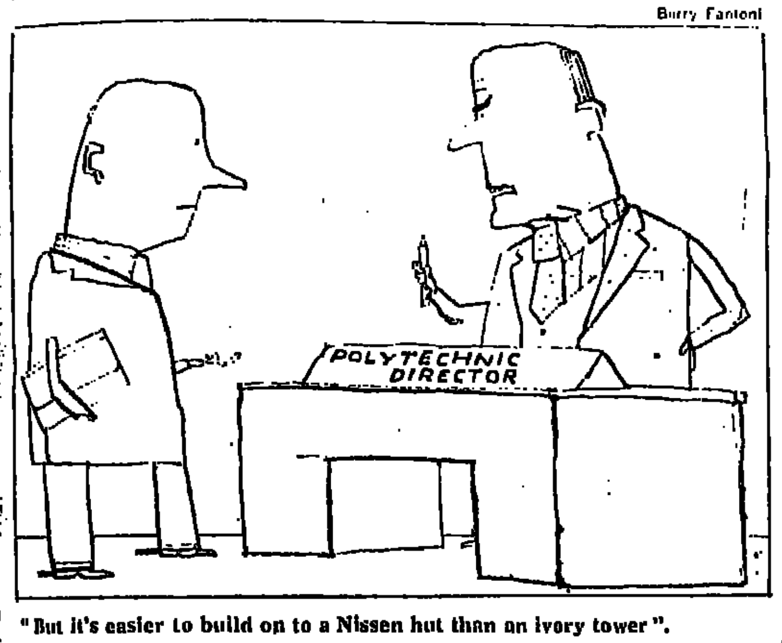

"But it's easier to build on to a Nissen hut than an ivory tower".

Poly heads object to 'unfair' places share-out

by Simon Midgley

The polytechnics are to press for a bigger share of student numbers in the 1980s. The Committee of Directors of Polytechnics is planning to meet Mrs Williams, Secretary of State for Education and Science, to put its case.

This comes after new figures for higher education places overturned plans outlined in the 1972 White Paper *A Framework For Expansion* for the universities and the public sector institutions to share numbers equally by 1981.

In a written parliamentary answer last week Mrs Williams said the Government was to peg advanced further education places in polytechnics and colleges at 250,000 in 1981-82 while allowing universities to increase their numbers to 310,000.

The CDP believes this is a departure from the previous "even-handed" policy and sees Mrs Williams's failure to set a precise polytechnic target within the advanced and further education total as ominous.

These factors, together with her recent announcement that the universities are to receive a grant of £4.5m in the additional building programme, whereas local authorities are only allowed to provide a small increase in the resources allocated to polytechnics, have led to fears that the polytechnics' distinctive contribution within advanced further education could be eroded.

Dr Arthur Suddaby, CDP chairman, said this week that his understanding of "even-handedness" was of a policy of working towards "some ultimate situation where numbers are equal. I would say that when you look at the figures, there is still not the kind of clear development of the polytechnic sector that one would hope for and expect in the light of past declarations of policy. We cannot plan in a situation where so much is left in the air."

The CDP wants Mrs Williams to identify the precise contribution that polytechnics will make to student growth over the next five years.

The new projections mean that university numbers should rise from 272,000 in 1976-77 to 310,000 in 1981-82, an increase of 14 per cent. Scottish advanced further education and teacher training places would rise from 27,500 to 31,000, a 13 per cent increase, teacher training numbers in England and Wales would drop from 86,500 to 38,000, down 56 per cent, and other advanced further education places in England and Wales would increase from 130,000 to 181,000, up 39 per cent.

So although advanced and further education in England and Wales, which includes polytechnics, would increase by 39 per cent, there is to be a massive percentage fall in the number of teacher training places.

Dr Suddaby points out that the percentage increase for universities is calculated from a larger base sum—the total number of students—than that for the advanced further education sector. This would require a larger percentage increase in polytechnics for student numbers to start approaching relative equality.

He explained that there is no indication of how this 39 per cent increase is to be apportioned throughout the sector and that it might involve only replacing the lost teacher training places by diversifying college of education courses.

Dr Suddaby also questions whether, given present demographic trends, there is any need to advance university numbers at all. "At present we have a bulge that will then decline after 1982. Taken with the fact that students are not coming forward in the way they were expected to in the late 1960s we are rather sceptical about university expansion."

In 1977-78 there are 117,000 full time and sandwich course students in polytechnics. Of those 16,000 are teacher training students; 5,000 are on non-advanced work and 96,000 on advanced work.

● Mr Oakes, Minister of State overseeing Higher Education, confirmed this week in the House of Commons that the universities' provisional grant figures for the next three years, released in March, were being reconsidered in the light of the revised planning figure of 310,000 full-time university students in 1981-82.

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Damage to teaching on BEd feared

by Peter David

The rapid contraction of the teacher training system could jeopardize the range and quality of teaching on bachelor of education degrees, according to a confidential report discussed on Wednesday by the Advisory Committee on the Supply and Training of Teachers.

The report, by a working party chaired by Dr Edwin Kerr, chief officer of the Council for National Academic Awards, warns that by next year half the colleges running BEd courses will have student intakes of 100 or less.

It is clear that in many instances this will pose severe restraints on the range of work and, in particular, the range of subject studies, if viable teaching groups are to be maintained, the requirements of the validating bodies for staffing met, and an economic staff-student ratio maintained", it says.

The working party was set up by the ACSTT in November, 1976, to report on the future of the BEd. Its report contains detailed calculations showing the impact of reduced student intakes.

They are based on two tutor contact loads; one, at 15 hours a week, is typical of the existing workload in colleges of education while the other, 13.5 hours a week, is the maximum stipulated in a national conditions of service agreement.

"The calculations show that for every 100 students admitted to a BEd course not integrated with diversified courses a maximum of about seven subject areas can be offered to honours level with a 15-hours-a-week tutor contact load, or about six with one of 13.5."

With institutions becoming more restricted in the number of subjects they can offer on a BEd course the report concludes: "It is important for there to be coordination between them to ensure that an adequate range and balance of subjects continues to be offered."

A surprising feature of the report is its failure to take sides in the long-running debate on the relative advantages of "concurrent" or "consecutive" methods of teacher training.

Shop-floor placements to cost less

by Sue Reid

The Department of Education and Science is to reduce the fee levels charged to university and college sandwich students during their industrial placements.

A confidential draft circular issued this month by the DES for comment makes clear that the full-time fee during placements should be at a level which covers only the costs of supervision and organizing the placements.

The DES confirmed this week that the draft would form the basis of an official circular to be sent out within the next four weeks. It will follow an initial circular on sandwich students' fees issued by the DES in August which suggested that universities and colleges could charge the full level of fees.

Some students have since received bills of up to £500 for their year in industry. Previously the supervisory cost was spread over the other years of their courses.

At last weekend's National Union of Students' conference Mrs Williams, Secretary of State for Education and Science, admitted that the August circular was to be rectified.

The NUS, which has lobbied the DES on this issue, said this week: "It has taken the DES five months to rectify this mistake but we welcome their action."

AUT London Bill campaign triumph

by Judith Judd

The two-year-old battle over the London University Bill ended this week after university teachers had won important concessions which will enhance the power of university teachers on senate and will ensure that junior lecturers, the unions and industry have a bigger say in university government.

The Association of University Teachers has agreed to withdraw its petition against the Bill, which is designed to improve the university's statute-making power and the efficiency of its administration. MPs who have been blocking its passage through the House of Commons will now allow it to go forward for a formal second reading on Tuesday.

Mr John Akker, deputy general secretary of the AUT, said: "No one who was involved in the early discussions with the university could deny that there has been a very significant shift in its attitude and major progress achieved."

Other universities had been watching closely and the AUT's success showed how a determined union could use its political connexions in the Commons to deal with a university act of parliament or charter. "Now that we have achieved this major success it is likely that where a university is unreasonable we shall be contesting it." More than 50 MPs have supported the AUT.

The most significant breakthrough was the university's agreement last July to add an amendment to the Bill providing consultation for recognized trade unions on statutes, something no other university charter offers.

The right to consultation, first raised by the AUT, will also benefit the National and Local Government Officers' Association, the National Union of Public Employees and the Association of Scientific, Technical and Managerial Staffs. After the July agreement, NALGO withdrew its opposition to the Bill but the AUT fought on.

It has won a substantial increase in the number of lecturers on senate—from 30 to 40 per cent—and in the number of junior lecturers who will be coopted.

Teacher members on senate will be elected directly from the larger colleges. The smaller ones will be grouped together to elect senators. The university had wanted to arrange elections by boards of studies, which would have reinforced the power of professors.

Changes will also be made in the composition of the powerful court which distributes £100m of grant each year. The court has said it will include representatives of trade unions, industry and commerce. The AUT expects this to be incorporated in the new statutes.

One of the most controversial parts of the Bill has been the safeguards to preserve convocation, which includes all the university's graduates and which elects 20 members of senate. The AUT proposal that all teachers should be members of convocation is under discussion with the University of London Society and the Graduates' Association.

THES North American correspondent takes over

Clive Cookson takes over this week as *The THES* North American correspondent based at the National Press Building, room 541, Washington, D.C. Tel.: 638 6765. He was formerly the paper's science correspondent.

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NUS CONFERENCE

Boos turn to cheers as Mrs Williams triumphs

by Judith Judd

Higher education is not the Government's highest priority, Mrs Williams, Secretary of State for Education, told the NUS conference in Blackpool last weekend. She made no apology for this, believing it was right that the Government should concentrate on improving the position in schools and helping the 16 to 19-year-olds.

"The 'intermediate level' is the weakest in the British education system. At present there is a distinct financial incentive to leave school or full-time further education and rely on supplementary benefit for a part-time course up to three days a week or on a Manpower Services Commission Training Allowance."

Mrs Williams triumphed over barracking and heckling to deliver her speech. Angry ultra-left students crowded on to the platform behind her waving posters, and a six-foot cardboard axe and college of education students protested in the hall.

Mrs Williams kept her temper and received a standing ovation from many of the delegates. Mr Peter Ashby, deputy president of the union and conference chairman, described the protests as a "disgraceful display".

Students were angry because Mr Emmanuel Hand, a delegate from Northern Ireland, had been arrested and charged under the Prevention of Terrorism act when he arrived at Blackpool airport.

Mrs Williams agreed to telephone the Home Office on Mr Hand's behalf before and after the speech. She told the conference that, when she walked off the platform at the end of question time, it would not be because she was afraid of them but because she had promised to make the call.

Mrs Williams promised that tuition fees would not rise in real terms next year but would only increase with inflation, between 9 and 10 per cent.

Some questions had to be asked, though. Should fees be charged or not? If there was no tuition charge how would the number of places given to students from overseas be rationed? Should only those who could pay the full cost be let in? Or should there be an uneasy compromise of a low fraction between nil cost and full cost? Could more be done to help students from poor countries and, if so, how?

She asked universities and colleges to look again at the role they could play in relation to traditional courses now that the DipHE was established and beginning to gather in strength.

"More of the same is not the answer to the long-term development of higher education. While there will always be a place for the specialized first degree and for advanced academic research, a blinkered policy of more of the same will simply mean a steeply declining curve in student numbers following the age groups 10 years from now."

Students stand up for tolerance

The National Union of Students clocked up two famous victories at its conference. It finally threw out its notorious policy of denying free speech to anybody loosely labelled fascist or racist, and it announced its intention to suspend any member unions discriminating against Jewish societies on the grounds that they are Zionist and therefore racist.

These decisions are much better indicators of the student mood than either the shouting down of Mrs Williams on Friday or the midnight march on the police station where Emmanuel Hand, the unfortunate delegate from Ulster, was detained overnight under the Protection of Terrorism Act.

Wigging secretaries of state may be a deplorable tradition, but it is well established in student politics. In any case, the disruption was caused by a relatively small number of over-excited Trotskyites making the most of a rare opportunity to get their own way.

Most of the time, the extreme Left found itself outwitted, outmanoeuvred and outvoted by the combined forces of the Federation of Conservative Students and the ruling Broad Left alliance of Communist and Labour Party members. For the ultras of the Socialist Students' Alliance (SSA) and the National Organization of International Socialist Students (NOISS) it was a galling experience, and as their defeats mounted so did their frustration and their jeers.

The Broad Left did not have everything its own way, however. Sue Slipman, the union president who is also a member of the national executive of the Communist Party, was clearly discomfited by the Tories' habit of announcing noisily that they had dreamed up all the Broad Left's policies for them. She preferred to claim, during the debate on rescinding the "no platform" policy, for example, that she was sinking her difference with the Conservatives only because the moral principles at stake transcended party political divisions.

Not all her troops were always convinced. On two of the most important issues—the ending of "no platform" and the prohibition of *ultra vires* payments—the votes were perilously close. The executive's cautious line on *ultra vires* scraped through by only 338 votes to 320. On "no platform", a card vote produced 273,078 votes for rescindment and 246,510 against. Clearly, many supporters of the Broad Left were voting with the NOISS and the SSA.

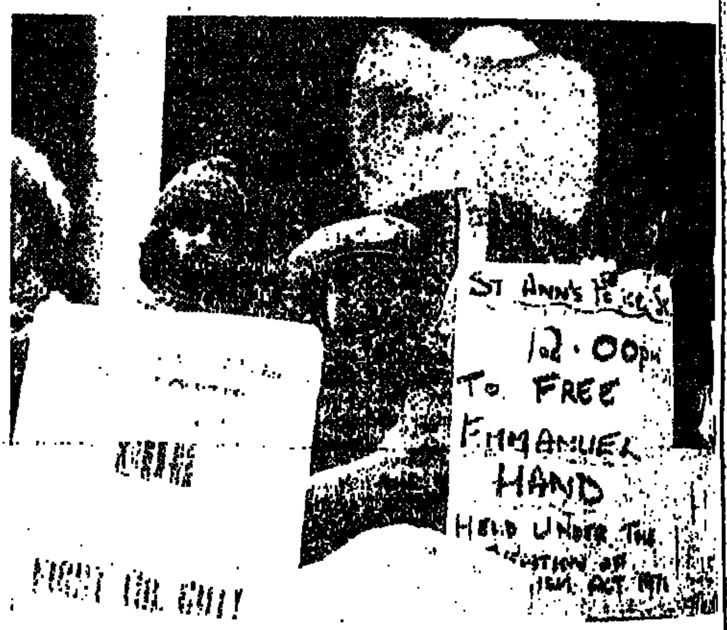
In the eyes of a lot of Broad Left supporters their representatives on the national executive had been tainted by too much contact not only with Conservative students but also with the Government. By bringing Mrs Williams proudly to the rostrum, Miss Slipman [illegible] deputy, Mr Ashby, may ha[illegible] a tactical error. Floor [illegible] throughout the conference [illegible] aged "executive sherry parti[illegible] directors and principals and [illegible] chat with ministers".

Hence Mr Peter Ashby, w[illegible] months has been working h[illegible] persuade Whitehall to adopt [illegible] NUS's ideas on tuition fees [illegible] censured for not going to [illegible] University to raise the mora[illegible] occupying students. Direct [illegible] remains a potent symbol fo[illegible] union's membership.

Nevertheless, the Broad Left [illegible] Conservative axis remained [illegible] enough to ensure that the [illegible] emerged from Blackpool a [illegible] tolerant and, it must be said [illegible] respectable outfit than the ex[illegible] Left would have wished. The ex[illegible]tive was also able to push th[illegible] important practical reforms and [illegible] the pruning of expenditure and [illegible] creation of a constitutional [illegible] body.

For the ultras, the whole [illegible] may well look like a great be[illegible] or at least a nightmare examp[illegible] the iron law of oligarchy. But [illegible] ordinary students, the increa[illegible] maturity and sophistication of [illegible] union is likely to bring nothing [illegible] good.

Peter Dav[illegible]



Mrs Williams faces the axe as students protest about college closures.

Zionism ban overthrown

The spectre of Jewish societies being banned by student unions on the grounds that they are Zionist and therefore racist has receded after an overwhelming decision by the NUS to introduce a constitutional safeguard against discrimination.

Under the amendment to the constitution, which will have to be ratified by the next conference in April, the NUS will be able to suspend any member union "which discriminates against any of its members on the grounds of race, religion or creed".

The number of unions restricting the rights of their Jewish societies has dwindled from nearly 10 earlier this year to only one—London University's School of Oriental and African Studies. The North East London Polytechnic student union withdrew its restrictions on Jewish society activities before the start of the conference.

The union at SOAS is withholding funds from its Jewish Society but claims that Jewish students are free to campaign for the Zionist cause if they wish to. Mr Peter Butterworth, SOAS president, opposed the constitutional amendment on the grounds that the NUS executive should not be allowed to interfere with the decisions of member unions.

But delegates voted to add the suspension clause to the constitution after it was agreed that the decision to suspend a member union would have to be taken by an NUS conference and not just by the executive committee.

Ms Slipman, president of the union, said after the debate that the vote had saved the democratic base of the student movement.

Mr Moshe Foreman, chairman of the Union of Jewish Students, said that the move would give only little comfort to Jewish students: "No action will be taken before the next NUS conference against unions which have curtailed the rights of their members. We obviously cannot wait indefinitely for a solution."

A separate debate was held on the Middle East issue itself. An emergency resolution sympathetic to the Palestinian cause and supporting the demand for a Palestinian homeland commanded a massive majority among delegates.

But after a powerful and emotional speech by Ms Slipman, part of the motion calling for the dismantling of Israel as a Jewish state was deleted.

Call for unity from president

Students must reject mindless slogans and the sectarianism of the past, Miss Sue Slipman, the president, told the conference in an opening speech which brought out her favourite theme of unity.

She said the academic year was a watershed for the union and appealed for unity which went beyond narrow political divisions. "The imposition of narrow ideological policies shows a contempt for the identities and attitudes of our contemporaries."

Unity, she believed, should be based on greater democracy both nationally and locally. All students knew unions which were "atrophied and empty shells". They operated more as political parties than student unions and exercised a form of mind control which antagonized most of their members.

The extension of democracy should begin within the union. Referring to the debates about the rights of Jewish societies, she said the Jewish community had wrongly identified anti-semitic motivation. Outsiders would judge how democratic the NUS was on the basis of this issue. The executive was proposing that any union which denied its members rights should be outlawed.

However, the two debates on free speech and the Middle East were not the union's main tasks. It had first of all to put its finances in order after the collapse of its travel service last year and it had to sort out its priorities.

She disagreed with those who said that Mrs Williams should not be allowed to speak to the conference because the Government had made cuts in education spending. This was the union's chance to make clear what it wanted.

'No platform' policy ends

A stirring appeal from Ms Slipman, the NUS president, for all students to stand together against racism led to a vote to abandon the controversial policy of denying a platform to racists.

Delegates voted by 273,078 to 246,510 against retaining the "no platform" ruling introduced four years ago with the primary aim of curtailing the activities of National Front speakers.

A second attempt by ultra-Left delegates to retain the policy was also countered again because of the united front put up by Communist, Labour and Conservative delegates. An amendment calling for a reaffirmation of the union's commitment to the defeat of racism and fascism and its "no platform" policy failed on a card vote by 302,629 votes to 190,196.

Secretary of state to rescue

by Sue Reid

Mrs Williams intervened last weekend to free a Belfast student held by police under the Prevention of Terrorism Act after flying into Britain to attend the conference. Mr Emmanuel Hand, a 19-year-old further education student, was detained at Blackpool airport and was questioned for 24 hours before being released.

News of his plight was announced before Mrs Williams gave the opening speech. She had already contacted the Home Office and before leaving she again appealed to Mr Merlyn Rees, the Home Secretary, for Mr Hand's release.

Mr Hand, whose brother was detained in custody for two months earlier this year by Belfast police, said after his release that his freedom was a direct result of Mrs Williams's plea to the Home Office. Police had informed him that his detention had been "a mistake".

More than 100 conference delegates picketed the local police station at midnight at the close of the first evening's debate demanding his release. But Mr Hand was being held elsewhere.

Public accountability upheld

Students donating union funds to outside political causes will in future breach official NUS policy. A bitter debate in the closing hours of the conference resulted in narrow victory for an executive-led resolution accepting the principle that students should be accountable for the way they spend public money.

In a key passage the resolution declares that if students want to donate to external "non-student" causes, they should make contributions from their own pockets or raise the money themselves. It also calls on all member unions to make properly audited accounts available for inspection by the public.

The resolution comes only weeks after the Birmingham Polytechnic students' union donated £100 to striking firemen. Other unions have used their official funds to hire buses for transport to the Grunwick picket-line.

Birmingham's president, Mr Mick Archer, appealed to the NUS conference not to abandon its commitment to union autonomy: "We must not abandon our right to make donations as gestures of solidarity with the striking working class", he said.

But most members of the leadership supported the resolution. Ms Slipman told delegates to take heed of what had happened to student unions in Europe which had been "smashed" after attempting to exceed their legal rights.

She denied claims by far Left delegates that the NUS was acquiescing in the face of a campai[illegible] similar to Mrs Thatcher's attem[illegible] in 1972 to diminish student contr[illegible] over union funds. Then, she said [illegible] the Government had proposed [illegible] giving registrars direct respons[illegible]bility for union expenditure.

The resolution, which was passed by 338 votes to 325, also calls for a review of the way the Government funds student unions. Arguing that the present system discriminates against further education colleges where many students have to pay their own union fees, it calls for a guaranteed minimum student union fee for all students, whether they are full-time or part-time, on a mandatory or discretionary grant.

The minimum payment would then be supplemented by an annual [illegible] level capitation allowance, [illegible] settled by negotiation between individual student unions and the governing bodies of their colleges.

An alternative policy, proposed by far-Left delegates, was described by Mr Pete Ashby, deputy NUS president, as "a suicide policy which would isolate us from the rest of the community".

It would have committed the NUS to contesting all legal rulings that a union donation was [illegible] *vires*. The motion claimed that student unions should be free to spend money in whatever way their members wanted.

NUS leaders, however, made clear that they were anxious not to provoke legal challenges on the *ultra vires* rule. A document circulated said the executive's [illegible] view was that student unions should not make any payments the courts would be likely to regard as [illegible]

APT protest about share of resources

The Association of Polytechnic Teachers has protested to Mrs Williams, Secretary of State for Education and Science, about the unequal way resources are being distributed between universities and polytechnics.

Dr Tony Pointon, the union's national secretary, has written asking for an objective review of the relative facilities available to polytechnic and university students. His comments follow her recent announcement that the universities are to receive a grant of £4.5 million for modernization and adaptation in the 1978-79 additional building programme.

The only provision for polytechnics is that the Department of Education and Science is to allow local authorities to provide a small increase in resources allocated to them.

Dr Pointon says: "It is not the practice of the polytechnics to complain publicly of their lack of facilities, since this necessarily would have an impact on recruitment of students. At the same time it is undeniable that there are some where the facilities fall far short of those which students know exist in universities.

"Cases exist where lecture theatres are in limited supply and where lecture rooms are inadequate. More general are the deficiencies in staffroom facilities, common room facilities and in student union amenities." There are, he adds, some polytechnic departments existing in condemned buildings.

Dr Pointon calls for an "objective review" before any further allocation of building funds is made and before "any further propaganda about vast sums expended on the polytechnics is allowed to distort the reality of the provision in the two sectors".

"It should not be necessary for the polytechnics to launch a public campaign to exert pressure to correct the situation when so much damage would be done to themselves by such a campaign. However, it may be that the absence of any concerted lobby other than APT will render such a campaign necessary."

Sir Harold Wilson, Chancellor of Bradford University and former Prime Minister, talks to Mr James Cameron, journalist and author, after awarding him an honorary degree of Doctor of Letters on Saturday. At the same ceremony 50 first degree and 195 higher degrees were awarded.

11,000 fewer apply for teacher training courses

by Simon Midgley

Applications for teacher training courses are still falling, according to figures just released by the Central Register and Clearing House. For all teacher training courses in 1977-78, apart from the postgraduate certificate of education but including diploma of higher education courses and some degree courses other than the bachelor of education, applications were nearly 11,000 less than last year.

There was also an 8.1 per cent drop in the number of applicants for one year PGCE courses. Last year 16,109 men and women applied compared with only 14,790 in 1977. A total of 11,565 who applied through the clearing house were accepted for courses leading to a teaching qualification.

The target intake to certificate of education and BEd courses, and to DipHE courses probably leading to a teaching qualification, had been reduced by 40 per cent from 20,000 to 12,000 for autumn, 1977.

Another 250 were accepted for BEd courses by university institutions which recruit through the universities' clearing house. And 1,834 students who had registered through the Clearing House were accepted for courses not likely to lead to a teaching qualification.

Departments of education in 29 universities and 13 polytechnics and 61 colleges or institutes of higher education and colleges of education accepted 9,373 students for one-year postgraduate courses.

Of those accepted for the three- and four-year teaching courses and the two-year DipHE 57.4 per cent had passed two or more A levels and 81.4 per cent had passed one or more, compared to 48.5 per cent and 75.7 per cent respectively for the 1976 entry.

A spokesman for the clearing house said that although the standard of applicants had improved it was hoped to swell the percentage of students entering teaching courses with at least two A levels to around 97 per cent over the next two years.

It was important that good potential applicants were not discouraged from applying because of the adverse employment publicity, she said. Now that the government had reduced overall teacher training numbers it was hoped there would be no unemployment problem in future.

Surplus colleges to be put to new use

Many surplus college of education premises are expected to be used for other purposes, according to Mr Oakes, the Minister of State in the Department of Education and Science.

His statement came last week in answer to Mr Bryan Davies, MP for Enfield North, who asked what progress was being made in disposing of such premises.

Mr Oakes said it was hoped that 14 colleges or annexes and parts of two others would be used for educational purposes.

Two other colleges and a part of a third would be sold for other purposes, he added, and one annexe, previously used for education would be surrendered.

"These premises are owned either by local education authorities or by voluntary organizations which are therefore responsible for their disposal. Such property transactions can take a long time to complete and involve questions of commercial confidence. Many of the buildings will not become available until the training of present students ends in the next few years", he said.

"I hope that wherever possible an educational use will be found for the surplus buildings, but I recognize that in some cases the location and nature of the property makes this difficult."

At the following colleges and annexes alternative uses are "firmly in prospect", although Mr Oakes says that negotiations are "well advanced" in a number of other cases.

The Northumberland Education Authority is adapting part of Alnwick College to assist with secondary school reorganization; Mary Ward College, Nottingham, is to be taken over by the Institute of Geological Sciences; Rudbrook College, Shrewsbury, is to be taken over by Shrewsbury Technical College; Wentworth Castle, Barnsley, is to be used as a residential adult education centre; and Saffron Walden College, Essex, is to be leased to the Bell Educational Trust which is interested in establishing an English language school for foreign students.

Their final student intake was in 1974. Among those whose last intake was in 1975 are Coloma College, West Wickham, Kent, which is to be used as a Roman Catholic comprehensive school, and Endsleigh College, Kingston-upon-Hull, which is to be acquired for the Hull College of Higher Education. A new further education college for the Royal National Institute for the Blind is to be established in Hereford College's premises and the National Union of Teachers is acquiring Kesteven College, Grantham, for a staff training and conference centre.

Others in this group include Philippa Fawcett and Furzedown College, London, which is to be used as a comprehensive school; Putteridge Bury College, Luton, which is to be used for other educational purposes; Sarum St Michael, Salisbury, where part of the premises is to be sold for use as a hostel for nurses; and Sittingbourne College which is likely to be used by Kent Education Authority as an in-service training centre.

It is hoped that Culham College of Education, Abingdon, which accepted its last intake in 1976, will be used as a European School in connection with the Joint European Torus (JET) project.

Newland Park College, Chalfont St Giles, is to be used for other higher or further education purposes and the spare capacity in what was formerly the teacher training section of Preston Polytechnic is to be used for other college purposes, including in-service training. Both had their final intake this year.

The annexe at Camborne (St Mark and St John College) is to be used for in-service training. At Peterborough (Kesteven College of Education) the annexe will be used for in-service training as an outpost of Bishop Grosseteste College, Lincoln.

Review of music training sounds new notes

The number of students entering music colleges should be reduced but all the colleges should offer four-year first degree courses carrying mandatory student awards, according to the report of the committee of inquiry into the training of musicians.

The findings of the committee, set up by the Calouste Gulbenkian Foundation under the chairmanship of Lord Vaizey to review provision for education in music, were made public earlier this week.

The music colleges should concentrate mainly on training intending performers and instrumental teachers rather than those intending to become class music teachers or those merely seeking a higher education, it said. Orchestral playing should be given a higher priority and the ratio of teachers to students should be increased.

The report recommends that the Royal Academy of Music, the Royal College of Music and Trinity College of Music should become part of the public sector, either by becoming monotechnics maintained by local authorities maintained by local authorities or else colleges of London University.

On provision now the authors say: "It is unsatisfactory in principle that the form of public subsidy provided to some of the most eminent colleges in the country should be one of a guarantee against loss rather than a positive programme for the development of music training and education."

Residential accommodation for music students in London should be trebled and fees for part-time teachers should be linked to full-time salaries for comparable posts elsewhere in higher education. On this point the committee goes so far as to suggest that the low fees paid to part-time teachers in the London colleges could be the subject of action by the trade unions concerned under Schedule 11 of the Employment Protection Act, 1975.

As far as the school-age musician is concerned, the committee is concerned at the wide disparities that exist between the provision made by local education authorities in different parts of the country.

The first priority was the identification and encouragement of talent at an early age. Much could be learnt about the nature of "giftedness", and how to deal with it, from experience in other areas, including non-academic areas such as sport.

Local education authorities should be prepared to support their gifted children at specialist music schools which should either become direct grant schools or be maintained by local authorities.

Double O and A levels, in both performance and theory, should be legitimate examination options in music.

The committee recommends the setting-up of a working party to consider the extent to which certain accompanying and touring orchestras can fulfil a training role.

News in brief

Methodist archives go to Manchester

The archives of the Methodist movement, including John Wesley's letters, were deposited in Manchester University's John Rylands library this week. The archives, which include 26,000 books as well as a collection of manuscripts, will take their place beside the Methodist, Unitarian, Moravian and Quaker literature which the library already possesses.

The legal agreement covering the transfer and deposit of the collection was signed on Monday by the Rev B. Arthur Shaw, president of the Methodist Conference and Professor Sir Arthur Armitage, vice-chancellor of Manchester University.

Computer Blaises trail

Blaise, the new British Library Automated Information Service giving access to information contained in five million books and technical articles, was officially opened last week by Mrs Williams, Secretary of State for Education and Science.

The service, developed at the specific request of the library community, also fulfils the needs of scholars reviewing literature.

Inquiry into local history

An inquiry into local history has been set up under the chairmanship of Lord Blake, provost of the Queen's College, Oxford. A committee has been established by the Standing Conference for Local History to assess the pattern of activity and study of the subject.

PCL ratios

The staff: student ratio at the Polytechnic of Central London was reported incorrectly in *The THES* last week as 8.77 to one. The correct figure is 10.11 to one.

Overcome fear of technology in education planning–Nuttgens

A Great Debate in miniature took place in the Nash House headquarters of the Society of Industrial Artists and Designers in London earlier this week, when leading designers, industrialists and educationists assembled to discuss a new radical review of education.

"Learning to some purpose", written by Dr Patrick Nuttgens, director of Leeds Polytechnic, on being awarded the 1977 Burton Design Award by SIAD, called for a fresh look at the British education system from a different standpoint if the real needs of society were to be met.

A fear and dislike of technology and therefore of the modern world had dominated education for the past 150 years, he argued. It had stifled any development of the sense of excitement and wonder which could have been built upon the fascination with science evident in the 17th and 18th centuries.

For too long the educational world had been dominated by the ideal of a liberal education—of learning for its own sake. Now there was an urgent need, Dr Nuttgens argued, to study the world of action, of making and doing, as "the mainspring of a relevant education and a corrective to a dead tradition".

The idea that the ordinary mind dealt with things and that the educated mind dealt with ideas—"a pure world of clear and perfect unities not to be found in the imperfect, flawed and confused world of industry and work"—was exerting a stranglehold upon the whole of education.

Any system that ignored technology and its root, creative ingenuity, is in itself inert and removed from the reality of our world, he said. "What I want to introduce is a different emphasis based like technology, not just on what people or things are but on what they do—a different relationship between people and knowledge—the knowledge of action."

As a basis for this new approach the process of designing—thinking out and making—could be analysed into five sequential stages: the discovery of genuine needs; the assembly of facts; the analysis of information; the expression of the idea; and the moment of realization.

Sir Toby Weaver, professor of education in the Open University, said he was sympathetic to what he believed Dr Nuttgens was trying to say. However, he did not think Dr Nuttgens had succeeded in articulating the problem successfully.

Sir Toby felt that Dr Nuttgens had not put his finger on the essential difference in the two approaches to education. The scientist started with problems of knowledge whereas the educator they wanted to see began with the problem of action.

New qualifications get CNAA recognition

by Patricia Santinelli

The Council for National Academic Awards is to recognize Technician Education Council and Business Education Council qualifications for entry to its courses.

In a statement issued this week, the council indicates that students with the new qualifications whose attainments compare with Ordinary National Certificate and Diploma level should be eligible for consideration.

It has, however, been difficult to determine what standard is equivalent to a good ONC or OND. Two CNAA working parties on science and technology agreed on a minimum of three passes with merit in Level III units, but it was also thought that two passes might do, if the appropriate subjects had been passed with merit at Level II.

Until the problem is solved directors and principals of institutions conducting CNAA courses have been reminded that they can admit students with TEC awards under the power of discretions in CNAA regulations.

The new qualifications replace the ONC and OND which are being phased out.

Colleges staff future 'bleak'

by Simon Midgley

Colleges of education and their staff could become education's Cinderellas after merging with polytechnics and universities.

This pessimistic note is struck in a survey of developments in science teacher training published by the Association For Science Education.

Reflecting on the implications for teacher training of the mergers the authors warn that in universities and polytechnics the criteria for promotion tend to be academic rather than pedagogic.

They also say that where university or polytechnic staff take over teaching formerly conducted by college staff there is no certainty that they will have had any teaching experience and there is a risk that expertise could be lost.

The report is intended to complement a previous survey on the supply of science teachers. It looks at the diversity of initial training in the light of concern expressed by practising teachers about the appropriateness of such courses, particularly in view of the recent reorganization of the colleges and the drastic reduction in the number of teachers they will produce.

Post-merger decisions, says the report, are being taken on administrative and logistic rather than educational grounds. "There is a real danger that curriculum balance in schools may be determined by numbers of applicants to BEd degree courses."

One of its most disturbing conclusions is that the paucity of college intakes in the physical sciences suggests that non-viability will cause closure of these courses in the BEd and a "dispersion of expertise that is needed for the training of primary and middle school teachers of science."

There was also a danger that science in the primary and middle schools would be taught by a preponderance of teachers having a biology BEd, while those with a science degree and a postgraduate certificate of education would find secondary posts more easily than those with a science B.Ed.

Commenting on the increasing prominence of the "new" modular B.Ed degree, designed to give students a broader range of subject choice and an opportunity to shape their requirements more closely to their particular needs, the authors say that greater choice tends to lead to a reduction in course continuity and coherence.

The modular degrees with a science component varied enormously, both in structure and in content. The trend was for the teaching components to be presenred consecutively, after two years of academic study, although there was some evidence that current debate questioned the effectiveness of this pattern.

There was also less individual contact between students and staff. "Although student counselling is an integral feature of most B.Ed. courses the close personal contact of the small department will no longer exist and more responsibility will be thrown on the student to make sense of his total course."

The teacher training emphasis in the BEd degree, as with the PGCE, was likely to exist mainly in the "professional" units—where education studies, method courses and teaching practice had often been amalgamated into one component. The authors say there is an "urgent" need to staff these adequately and to re-think content and presentation.

The report concludes: "Not least among the concerns of those who remain as part of the re-organized larger institutions is the disappearance of the warmth and cooperation that characterized many colleges of education, and their replacement by management processes in which confrontation and conflict are prevalent."

Science Teacher Training: A Survey of Current Developments in Eight Colleges of Education from the Association for Science Education, College Lane, Hatfield, Herts AL10 9AA, price 60p plus 20p postage and packaging.

Poly's China exchange is British first

by Maggie Richards

A pioneering educational exchange programme with China has been started at the Polytechnic of Central London, the first time a British educational institution has established a direct link with that country.

Until recently most of the educational interchange has been conducted by the British Council.

This year the polytechnic has been able to arrange for five in its Chinese studies department to study in China for a year while five Chinese would-be teacher trainers spend two terms at the polytechnic.

The Chinese connexion began last year when the Peking Languages Institute agreed to second a teacher to the polytechnic.

Mr John Gittings, senior lecturer in Chinese Studies in the polytechnic's School of Languages, described the exchange programme as "immensely valuable".

The offer of a Chinese lecturer had more or less coincided with "the greater interest the Chinese are now showing in higher education abroad". One reason for this interest was that the Chinese had started translating Western Literature again. During the Cultural Revolution, 1966-77, all translation was stopped. Now they needed translators once more.

The Chinese section of the modern languages school was founded in 1974. Last year was the first time students were sent abroad to study Chinese—three went to Taiwan. The polytechnic is the only one in Britain to offer a full four year undergraduate course in Chinese.

Oxford, Cambridge, the School of African and Oriental Studies, Edinburgh and Durham universities also offer Chinese studies.

Mr Gittings is convinced that in future educational interchange with China is bound to increase. "With the cultural separateness and technical difficulties of the language you must have some direct contact", he said.

Recurrent education scrutinized

Barriers facing teachers and b... casters in their attempts to ... their recurrent education at h... in Europe and in the Third ... came under scrutiny last week ... one-day seminar.

Held at Alexandra Palace, ... seminar on "Recurrent Edu... and the Third World" in... Open University staff, represen... tives from the British Broadca... Corporation, and two speakers ... West Deutscher Rundfunk ... Cologne.

The barriers facing work... the field of recurrent edu... were outlined by Mr John Ra... of the BBC's further education de... partment.

It was difficult to relate ... Third World countries to the en... vironment of viewers in Britain ... suggested. As people's attitudes be... came more inward-looking, the ... tion became worse. This co... seen in the growing alienation be... tween people in Britain and Eu...

The gulf between teachers ... media specialists also created pr... lems. There was a vast divide be... tween the academic and the br... caster on the one hand, and ... viewers on the other. This ha... be considered before even cont... plating how to break down ... barriers between differing ... cultures.

Two major areas of concern hig... lighted at the seminar were ... objectivity and accuracy of the ... maker, and the lack of understand... ing and coordination between ... involved in recurrent education ... Europe.

From WDR Roshan Dhunjib... spoke of her experiences in mak... programmes about Third World countries for European televi... Europe had to recognize that ... had something to learn from ... of the Third World recurrent educa... tion practices, she said.

Medical study in London 'threatened'

Government policies are threatening irremediable damage to the study of medicine in Greater London, Mr Malcolm Godfrey, dean of the Royal Postgraduate Medical School of the University of London, warns in his 1976-77 annual report.

Proposals for achieving a more equitable distribution of National Health Service capital would result in a movement of resources away from the metropolis to other parts of the country, he says.

"It would appear that financial pressures are being used to produce changes in the provision of health services and the necessary NHS back-up for medical teaching and research."

Although the long term aim of the policies might be desirable, service planning and decisions about the pattern of academic medicine in London and the rest of the country should come first. The reallocation of finance should then follow, on the basis of what had been planned.

His warning follows the government's Resource Allocation Working Party proposals for identifying new target financial allocations for Regional Health Authorities, which would result in a movement of resources away from the four Thames regions to other parts of the country.

The RAWP was set up by Mrs Barbara Castle when Secretary of State for Social Services, to review the arrangements for distributing NHS funds to RHAs, area health authorities and districts so as to find a pattern of distribution responsive to relative need.

Having identified regions whose health needs were underprovided and other areas where there was said to be overprovision RAWP submitted its full report in September, 1976.

Mr Godfrey said Hammersmith Hospital, where the RPMS is based, entirely supported the concept that under-provision of health care should be remedied. However, it took only a rapid look at the NHS in the area to doubt whether the RAWP indicators of health need were reliable.

They were also concerned as to whether in Greater London the new proposals were compatible with the Secretary of State's responsibilities under the National Health Service Reorganisation Act 1973 to make available facilities for university clinical teaching and research connected with clinical medicine.

The heavy concentration of the medical schools of the University of London made this an "extremely difficult and important" problem, and the university has already established a working party to consider the implications of the RAWP report.

The first major show in Leicester Polytechnic's new exhibition hall saw two of the three exhibitors, Loughborough College of Art artists Michael Harrison (left) and Philip Thompson, sitting in front of colleague Geoff Brunell's Tantric-influenced paintings.

Courses too short, Tolley says

Many degree and diploma courses are too short to prepare professionals to sustain the pace of change required in an era of rapid technological advance.

This view was expressed by the Reverend George Tolley, the principal of Sheffield City Polytechnic, last week at a degree and diploma award ceremony.

He told students: "I am convinced that many of our courses are now too short to deal adequately with all that is required of a professional who has to sustain the pace of change required in a technologically based business."

As an example, he said that although a degree or diploma in engineering might be quite adequate for those who would provide support in a technologically based industry, it was not adequate for those who must provide the leadership and innovative thinking.

"We must, I am convinced, face up to the need to require longer and more demanding courses for some, but not all in higher education and face up also to the concentration of costly and high level investment in equipment and teaching skills which that will require."

He added that an energy-based technology was being superseded by a technology that required the movement and conversion of data into information.

"That information has to take account of social consequences of production and marketing and distribution; it has to build in effective control of all the processes involved and it depends upon a high level of sophisticated interdependence between professionals from many disciplines."

All this required, he said, the breaking down of barriers between professions, much better skills in communications and much greater demands upon management.

Apart from the issue of technological advance, the other overriding concern facing society was that of unemployment.

There was a need, he said, to extend higher education and to open it up more and more to those who are currently denied access to it.

Equal opportunities as far off as ever—NEC director

Despite universal secondary education and the opening up of the further and higher education systems equality of opportunity remains as far away as ever, Mr Richard Freeman, executive director of the National Extension College in Cambridge, told a conference at Birmingham last week.

The conference, organized by the West Midlands region of the Association for Adult Education, considered ways in which tutors and organizers could respond to demands for adult numeracy courses that may follow the launching in January of the Yorkshire Television series *Make It Count*. The programmes and practice materials, including a workbook, are being compiled in conjunction with the NEC.

Mr Freeman was critical of the Government's attitude to adult education. Lip-service was paid to concern for the disadvantaged, while all the money and effort was put into developing the universities, the polytechnics, and the new colleges of higher education.

Many educationists were still devoted to the goals of the 1960s—equality of opportunity and an open education system. But this system was operating as a "gigantic sieve" for the benefit of the minority, to allow some people to attain top jobs.

An open further and higher education sector could not be condemned, it offered later opportunities for those unable or unwilling to take advantage of earlier schooling. But a new system, offering genuine adult education, was also required, Mr Freeman said.

He attacked the adult education service of the past, which had concentrated on catering for popular demand, rather than providing for educational need.

Unfortunately, politicians ... did not realize the funding imp... cations of providing basic adult ed... cation—while their enthusiasm in... creased for this type of provision, their budget allocations declined.

Genuine "functional and enabl... ing" education was needed: to help people cope with the complexities of modern life; to give them con... trol over their own lives; and to aid them to make the best of oppor... tunities available in a democratic society.

Some basic skills were not now as easily attainable as 100 years ago, Mr Freeman said: "The skills involved in bringing up children; interpersonal skills that might help bring down soaring divorce statistics, and might also improve our capacity to cope with the old; skills for coping with financial and legal problems; increasingly complex do-it-yourself skills.

"Above all, we need greater knowledge and understanding of local and national issues by all citizens. A society that calls itself democratic, that goes on believing it is democratic, and yet does not provide a basic education to enable people to exercise democratic responsibilities is heading for disaster. We are sowing the seeds of destruction of our prized democracy."

The NEC had felt compelled to make a response to the need for basic adult education—an input that might galvanize people and institutions in the field into action, Mr Freeman added.

But he stressed that the *Make It Count* course was not to be viewed as the first and last word on numeracy education. It was to be hoped it would prove a catalyst for numeracy courses in the future.

Mr Freeman is a member of the newly-formed Advisory Council on Adult and Continuing Education.

Distinction replaces credit

The term "distinction" to reflect outstanding performance is now to replace "credit" as the second level above a pass in the Business Education Council national and higher national awards when courses are introduced in further education colleges next September.

There will also be two levels of achievement—pass and credit—for BEC general awards. Credit will indicate a standard sufficiently high to qualify for direct entry to a BEC national award course.

North American news

Gene tests may mean evolution rethink

from Clive Cookson, North America correspondent

WASHINGTON

Harvard University biologist Richard Lewontin, whose experimental work has led scientists to discover an amazing degree of genetic variation between closely related species of animals and plants, has now shown that the variability is even greater than any previous work had indicated.

The latest results of his research group, published in *Genetics*, will force theoreticians to rethink their ideas about the origin of species—or speciation—and experimentalists to change their analytical methods.

The experiments centre on the technique known as gel electrophoresis, which Professor Lewontin and two colleagues (Harry Harris and Jack Hubby) developed 11 years ago to get a clearer view of individuality in nature, and in particular the relationship between variations in a particular feature and those in the genes responsible for producing it.

Gel electrophoresis allows biologists to compare specific enzymes or other proteins produced by different individuals. Differences can then be related to the structure of the associated genes.

The method involves observing the movement of protein molecules through specially treated gelatin under the influence of an electric charge. It is most easily applied to enzymes because they are more readily detected in small quantities than other proteins.

For example, to compare the same enzyme in ten fruit flies—favourite subjects for geneticists—a researcher would match up his flies individually and apply the homogenized material to a column of gelatin, putting each spot in an exactly equivalent position. When a voltage is applied, the proteins move up the gel at a rate depending on the molecules' precise size, shape and internal charge distributions.

After a certain time the electricity is switched off and the position on the column of the enzyme in question is revealed by the application of a dye to which it is sensitive. If the enzyme from each fly has travelled exactly the same distance, the scientist has assumed that its molecular structure is identical in each case. Different positions imply slight differences between the genes responsible for their production.

The technique was adopted enthusiastically by the international biological community and applied to a vast range of organisms. "It has become a sort of cottage industry", as Professor Lewontin put it.

Geneticists have used it to investigate evolutionary relationships, the process of speciation, the connection between diversity and habitat and many other problems.

Professor Lewontin's group has now found that by increasing the sophistication of the experimental procedure and making relatively small but subtle changes in the physical and chemical properties of the gel, a five-fold increase in the variability of the one enzyme investigated so far can be demonstrated.

Jerry Coyne, a graduate student, has used the improved version of gel electrophoresis to look at two species of fruit fly from the western United States for which previous tests had shown some genetic overlap or uniformity. He showed that this uniformity did not exist at all.

If these results are representative they will have important implications for evolutionary theory and the debate between those who believe natural selection is the driving force in the creation of new species and those who think random changes at the molecular level are more important. The idea that the creation of species may involve only a few genetic changes is beginning to look untenable.

Employers can afford to pick and choose law graduates

from our own correspondent

WASHINGTON

Headhunting for the 30,000 students due to graduate from America's law schools in June reaches its climax next week: any job offers must be accepted or rejected by December 15.

The select few, who are near the top of their classes in such elite law schools like Harvard, Yale, *Chicago* and Berkeley, are likely to have been snapped up by prestigious firms in New York and Washington at starting salaries approaching $30,000 a year.

Most in the middle of their classes and in the middle-ranking schools will have managed to pick up jobs with smaller firms at salaries around $12,000.

But several thousand of those graduating in June are unlikely to find a job at all in their chosen profession. According to the United States Department of Labour, the 30,000 graduates are competing for just 21,000 law jobs. By 1985 100,000 qualified lawyers will have to work in other fields or not at all, the Department estimates.

However, Professor Wayne McCormack, associate director of the Association of American Law Schools, says that these figures are misleading and that there is no clear evidence of a surplus of law students, even though enrolment at the 164 accredited law schools has almost tripled over the past decade.

He points out that although not all law graduates want to go into the legal profession, their qualification can be a useful entry into other jobs. There is no significant unemployment among law graduates, Professor McCormack says.

He is backed by Professor Dick Badger, placement director at the University of Chicago law school, who says employment prospects for law students are better than the impression given either by the "erratic" Labour Department projections or by "anecdotal journalism".

At the best law schools the market is very busy indeed during the season (from September to December) and the shoppers — the top law firms—often overwhelm the students. The Chicago campus, for example, is visited by 400 firms from all over the country at a rate of 15 to 20 a day.

The highly competitive recruiting race at the prestigious schools does have an advantage that analysts usually miss, according to Professor Badger. It means that students are judged on their legal skills.

In former more leisurely days, he says, the criterion tended to be who you knew and what business you were likely to bring the firm through family connexions.

A recent salary survey in the magazine *Student Lawyer*, published by the American Bar Association, also showed that there is effectively a two-tier market for law graduates.

The lawyer's first job has a crucial effect on his or her future legal career. If he or she joins a large city firm, a partnership and six figure salary are in prospect within 10 years. A small town lawyer will be able to sustain a comfortable middle class life-style, but can never hope to be in the same league—at least not if he stays in the legal profession.

American law firms like to pick new recruits from the same universities that their own partners came from, which makes it even more difficult for the newly established schools to break into the charmed circle of corporate law.

The firms that can afford to be really choosy are looking for someone in the top 10 per cent of his class at one of the top 10 law schools, he or she is also expected to have worked on the school's *Law Review*.

This is because writing ability is becoming increasingly prized by top legal employers. And, according to Professor Badger, membership of the *Review* "indicates willingness to undertake an awful lot of work". An applicant whose academic record shows he should have been on the *Review*, but who is not, will be regarded as lazy, work-shy or unable to communicate.

There are those who say they are beginning to detect a tendency for American law students to shy away from the fat salaries of corporate law and turn instead to "public interest" law firms. But only 1 per cent of Harvard law graduates went into public interest firms last year. Corporate law took 68 per cent.

Women's ban to end

Stanford University's 33-year-old ban on sororities—women student societies—is expected to be lifted by the Board of Trustees next week.

University President Richard Lyman said the ban "very clearly discriminates against women" and is therefore against the law as well as "what I would consider good university policy".

Hubert Humphrey centre

Last Friday was proclaimed Hubert Humphrey Day by Minnesota Governor Rudy Perpich. It was part of a nationwide drive to raise $20m for a Hubert Humphrey Institute of Public Affairs at the University of Minnesota. It will be "dedicated to the recruitment, encouragement and education of young men and women who show promise in political life".

Canada floats exchange plan

WASHINGTON

University teachers grow old, stale and disillusioned together . . . academic ambitions slowly wither for want of new blood.

These sad symptoms of stagnation are felt by university systems in many western countries. Canada, however, is about to make a nationwide effort to alleviate them.

The Association of Universities and Colleges of Canada and the Canadian Association of University Teachers are to launch a programme of inter-university academic exchange "to enhance the intellectual vitality of Canadian universities in a period of stable faculty numbers".

The scheme will start on a trial basis in the academic year 1978-79. Every university president in the country has pledged his support, says CAUT executive secretary Dr Donald Savage.

Exchanges will normally last one academic year, plus a summer research period immediately before or afterwards.

Participants will continue to be paid full salary and other economic benefits by their home universities. In all other ways they will be treated by the host institutions as if they were on full service there.

Most universities will pay travel expenses for the scholars and their families, but the academics themselves will be responsible for arranging accommodation.

The trial programme is limited to tenured faculty members. The organizers did not carry out a pilot study to gauge demand and they are not willing even to guess how much interest the programme will arouse.

If there is a big response CAUT and AUCC will go out and get funding for a permanent programme from federal agencies, Dr Savage says.

When a pair has been formed, each member is supposed to send duplicate applications to the presidents of the universities concerned and to CAUT and AUCC. They are expected to provide precise information on the suggested exchange of responsibilities.

There are significant differences between salary levels at Canadian universities. For example, academic pay in the Atlantic provinces of New Brunswick, Nova Scotia, Newfoundland and Prince Edward Island is relatively low, and someone going from there to an expensive city like Toronto might feel the pinch. But Dr Savage does not feel salary differences will be a major obstacle for the programme, especially as the exchanges are only for a year.

He expects the level of exchanges to be greatest in the fields where the job drought is most severe, such as physics, chemistry, the humanities and many social sciences. The few areas that are still expanding, for example, law and accounting, will participate less.

When two's a crowd

Tony Rennell on the problems facing academic couples in a shrinking job market

The drift towards sex equality in American universities is running into a barrier created by shortage of jobs. It is a collision that has thrown up a new campus dilemma—the academic couple.

The plaintive cry of one out-of-work wife of an in-work university teacher sums it up. "The faculty wife", she says, "is one step above the protozoa in the Great Chain of Being. Even if she holds top honours in her field, even if she has extensive teaching experience, even if she has written a book and published papers, she has a hard time getting hired at the same university where her husband works".

Hard, downright difficult even, but not impossible as a report in the *Stanford University Observer* reveals. Stanford has getting on for 50 couples on its academic staff. In 15 cases, husband and wife teach in the same department; in a further 15 they are in different faculties. The remainder are couples where the wife works as an assistant or researcher for her husband but without any formal academic status.

The problem of Mr and Mrs Academic is not, as might be thought, domestic dramas and disruptions spilling over into the laboratory and lecture hall and marital differences accentuated by professional rivalries. On the contrary, the report presents a picture of harmonious marriages. As one tennis-playing couple said: "Our marriage has survived mixed doubles, and that's a much harder thing than being in the same department in the same university".

Where the difficulties arise is in finding suitable twin jobs in the first place, and here the conclusion of the few who have managed it is that the odds are stacked against them. To quote one Stanford academic: "If both husband and wife are going for top-level positions, it cuts them both out of the general job market. In each field these is a best place to be, but couples may not be free to move. The answer may be that both have to go to a less prestigious institution".

With the employment market dwindling, to seek a job as a couple is inviting an abrupt academic cold-shoulder. A senior professor spells it out: "As a department chairman, I would advise young couples not to say their spouse needs a job too when they apply to Stanford or elsewhere. People who say 'I'll come only if you hire my spouse' are simply not hired".

In most cases, the successful approach has been one which raises howls of anguish from the women's movement: the husband accepts a tenured post, and his wife takes part-time or temporary work at the university in the hope of getting tenure later. The step to a tenured appointment is likely to involve her in a struggle, particularly if there are children at home.

But for many couples, the alternative has to be husband and wife taking jobs in different universities, maybe a thousand miles apart. The report notes that "divorce is sometimes the most sensible answer".

What are the universities doing to ease this growing problem of couples with parallel academic careers? One school of thought is that they are obliged to do nothing at all. Appointments should be made strictly on merit, leaving individuals to sort out their own domestic arrangements.

There are less harsh suggestions, job sharing being the most popular. If the dream of a dual appointment on the same campus is dashed, then there is always the elusive chance of persuading faculty heads to appoint two people to one post, splitting the work and the pay between them.

It need not be one job that is divided. Renato and Shelly Rosaldo successfully hold one-and-a-half posts in the anthropology department at Stanford, though they concede that what this means in practice is that they both work a full quota for three-quarters pay each. But it is a workable solution.

Shared appointments are commonest at smaller universities and colleges, which may use them to lure top recruits. They also fit in with the trend towards more part-time jobs as a way of saving money on salaries. A University of Virginia survey shows that a third of all college teaching posts are now part-time because of the cost of taking on full-time professors.

Bigger prestige institutions like Stanford are less keen on the idea, though they will consider sharing in particular cases. One professor commented: "Maybe the teaching could be half-time but the research could not. And couples couldn't work part-time in rapidly moving scientific fields."

Progress, though, has been made. Stanford recently altered regulations to make part-timers eligible for tenure in the same way as full-time staff. And it is now established that there is nothing on the university's statutes to prevent husbands and wives working in the same department.

But the difficulties are still immense and the prospects grim for any couple contemplating a joint academic life. It is the wives, moreover, who tend to suffer most. In the Stanford report, Sandra Blakeslee, the author, says: "Women are flooding the job market at a terrible time. Unless they remain single or fight with extreme determination, they may have to settle for a back seat in their dual drive towards recognition in academic careers."

Students to get 'consumer advice'

Colleges must provide intending students with a full range of "consumer information" under new regulations published by the United States Department of Health, Education and Welfare.

The information should cover costs of attendance, all available financial aid (federal, state and the institution's own programmes), the criteria used to determine the size and distribution of awards, descriptions of academic programmes and figures showing the percentage of students completing any particular course. The rules cover all colleges administering federal financial aid to students.

A survey of prospective students by the College Entrance Examination Board earlier this year showed widespread dissatisfaction with consumer information.

$2·4m for research priority areas

The National Research Council of Canada is keen to direct more of its funds to university scientists working in "areas of pressing national concern".

The council has identified three such fields, energy, environmental toxicology and oceanography. It has set aside $2.4m a year for "trategic grants" in these areas.

The three priority areas have been defined very broadly. Thus, energy research over the whole spectrum from fossil fuels to nuclear fusion will be eligible.

Results of the first competition for strategic grants will be announced in the New Year. The NRC's Office of Grants and Scholarships says it has received applications for much more than the money available.

India

Campus politics pose problems for Delhi

from A. S. Abraham

BOMBAY

India's most famous university, the Jawaharlal Nehru University (JNU), in the capital, New Delhi, a postgraduate institution founded in 1969, closed down on November 3 because of a protracted campaign against the vice-chancellor, Dr Nag Chaudhuri, and other officials by the JNU students' union. The union is dominated by the Students' Federation of India (SFI), the unofficial student wing of the Communist Party of India (Marxist) (CPM).

The union wants a high-level inquiry into the university's functioning during the 20-month Emergency rule of Mrs Gandhi. It has urged the dismissal of the vice-chancellor, the registrar, the academic affairs coordinator and the security officer. (The registrar has already resigned and the coordinator is abroad.) All four have been accused of aiding the savage repression of students during the Emergency, of "victimizing" teachers and students and of irregular appointment and admission procedures.

Student turbulence in India is nothing new. But it is noteworthy now for two reasons. One is that it has been raging almost continuously throughout the country since the Emergency and Mrs Gandhi's dictatorial regime were swept away in March. The other is that, closely linked as student agitations are to the doings of politicians, the alignments in student politics are reflecting the overall political struggle.

In part, the student grievances are, as they have always been, frivolous and local: better commonrooms and canteens, free bus passes, the postponement of examinations, easier questionpapers, more lenient marking, the right [*sic*] to copy and so on.

But the harsh crackdown on universities during the Emergency has, inevitably, left its mark. Students, who took a more active interest in the last general election than in any previous one, have become by and large much more politically aware.

If there was one single factor which contributed more than anything else to this awareness, it was the suspension of student union and student council elections during the Emergency and the appointment of representatives by university administrations of only those students who were politically acceptable, that is to say, belonged either to the Congress-inspired National Students' Union of India or to the All-India Students' Federation of India, backed by the Soviet-oriented Communist Party of India (the AISF, like its officially unacknowledged parent body, endorsed the Emergency).

Since the new academic year began, the main activity on campuses has been getting ready for elections, after more than two years, to student unions and student councils. The interest these contests is generating is unprecedented, a sure sign of how the Emergency appears to have politicized Indian students.

The most significant development in student politics since the end of the Emergency is the growing influence of the Akhil Bharatiya Vidyarthi Parishad (the All-India Students' Organization). This body, founded in 1949, has always had a considerable following among students, particularly in the more conservative northern universities in what is called the "Hindi heartland", the most populous and hence electorally the weightiest region of the country comprising the vast states of Uttar Pradesh, Madhya Pradesh and Bihar.

The ABVP is known to have had close links with the erstwhile Jana Sangh, a right-wing, Hindi-obsessed party with an atavistic belief in the regenerative virtues of Hinduism. It is an open secret that the Jana Sangh, in turn, has been controlled by Rashtriya Swayamsevak Sangh (RSS), a militant, aggressive body which claims to be a social service organization but nevertheless has cadres which drill in army-style. RSS was held responsible for the assassination of Mahatma Gandhi.

Followers of the former Jana Sangh now make up the largest single group within the ruling Janata Party. Both at federal and provincial levels there are constant struggles for supremacy between Jana Sangh-RSS adherents on the one hand and the more progressive elements within the Janata Party, notably the handful of socialists, on the other.

Apart from Delhi University, where it swept the students' union poll, and Benares (Varanasi) University in the holy Hindu city of that name, its traditional stronghold, the ABVP has won in at least 10 other universities, including Kerala and Calicut universities in the south and Utkal University in Orissa in the east. If this is anything to go by, it is moving out of its home base.

The student bodies linked to the Congress and the CPI, the NSUI and the AISE respectively, are both under a cloud for their activities during the Emergency. The ruling Janata Party has not yet been able to form a student wing, officially or otherwise, one reason being, of course, the ABVP's reluctance to give up its independent influence and its present privileged status which comes from its association with the former Jana Sangh.

The only other student organization that is making some progress is, oddly enough, at the opposite end of the political spectrum from the ABVP. That is the CPM-linked SFI. It does not have a large following, but it does have an intelligent, articulate and dedicated one.

West Germany

Union boycott call meets with mixed reception

by Günther Kloss

A boycott of lectures by many of West Germany's students began on November 28. It was called by the VDS, the country's National Union of Students, at an extraordinary meeting in September when 397 delegates voted in favour, 222 against and 90 abstained: 120 of the country's 180 colleges and universities voted in favour of the boycott.

The Ministers of Education of the *Länder* condemned the boycott as an "inappropriate measure" against real or imaginary shortcomings in the education system. Yet overall their reaction seems moderate, almost understanding.

The strike is directed against amendments to university laws which are now being discussed in most *Länder*. These propose the abolition of legally independent student unions, new disciplinary procedures, a prescribed normal length of study for each subject and a revision of the internal decision-making procedures (*THES*, October 21).

Students are also very dissatisfied with the level of grants, are concerned about the reduction in the number and range of courses offered because of staff cutbacks, and, in view of the current high unemployment, are worried about job prospects after graduation.

The VDS is using the present general malaise in institutions of higher education to regain some of the ground it has lost in recent years because of its internal dissension. It is not yet clear to what extent it has succeeded.

It is certain, however, that those students participating will, according to a recent court ruling, lose their grants for the period of the boycott. This, and the general lethargy among the student body which has resulted in a marked concentration on studies to the exclusion of any other extra-curricular activities, may prevent a widespread and prolonged boycott.

Indeed, first reports indicate that the initial support of the strike call was mixed. Only in a few universities, such as Bremen, Dortmund and Wuppertal, did lectures stop altogether. Most others, including the large institutions at Hamburg, Münster and Munich, worked normally, even if some students stayed away.

Republic of Ireland

Grant limits 'should be eased'

from Paul McGill

DUBLIN

Three times more university students received grants and scholarships in 1975-76 than in 1968-69, when the higher education grants scheme was introduced in the Republic of Ireland. In the same period spending on them rose from £424,000 to just under £2.5m, according to the Department of Education in Dublin.

What the statistics do not reveal, however, is how much of the increase has gone into the pockets of students and how much directly to the universities as the fee element of the grant.

Four years ago the average grant was £310, of which £190 was for maintenance. Since then university fees have rocketed whereas the maximum away from home grant has risen only £100 and the average grant has gone up even less because of the stringency of the means test.

Consequently, it is probable that only a small fraction of the increase has gone towards student support. A total of 9,559 awards were provided in 1975-76 from 10 different schemes. The bulk, 6,524, went to university students, but this covered only 31 per cent of students. In the colleges of education 55.5 per cent got grants, as against only 25 per cent in the vocational-technological sector.

University grants were originally £300 for a student living away from home, but the fee had to be paid out of this. In 1972 the fee and maintenance elements were separated and the latter was fixed at £250. Two years later it was increased by £50 and currently it is £350 maximum.

The issue has now reached the Dail, following the tabling of a motion by the Labour party education spokesman, Mr John Horgan, urging the Fianna Fail government to raise immediately the grant level and the eligibility limits.

Colleges get own degree-awarding body back

DUBLIN

The university link with Limerick's National Institute for Higher Education and Thomond College of Physical Education has come to an abrupt end. Last month the National University of Ireland held its first-ever degree-awarding ceremony in Thomond (*THES*, November 25). Now the Ministry of Education has announced that it will be its last.

Instead, the colleges, which are on the same campus, will receive their degrees from the National Council for Educational Awards, as will the National Institute for Higher Education, Dublin, when it finally comes into existence.

The restoration of degree-validating and degree-awarding powers to the NCEA was one of the earliest decisions of Mr John Wilson, the Education Minister, but it still remained for him to untangle the link which had been formed under the previous coalition government between the universities and other colleges.

Both academics and students have welcomed the change. And, speaking at the conferral of awards at Galway Regional Technical College, the NCEA's chairman, Dr Tom Walsh, said the decision would enable new fields of opportunity in higher education to be created.

Sri Lanka

Agriculture link plan

COLOMBO

Sri Lanka's Postgraduate Institute of Agriculture is seeking to establish links with the University of Cornell. A team from the United States Agency for International Development is in Colombo assessing the programmes and future plans of the institute in order to strengthen its teaching and research facilities.

The institute was set up last year and the majority of its students are from government departments and state corporations who have been granted full-pay leave to do postgraduate studies.

Italy

Enrolments at last begin to show downward trend

from Uli Schmetzer

ROME

Harassed educationists and politicians throughout Italy breathed a sigh of relief last month when university statistics revealed that for the first time in 30 years there has been a decline in enrolments.

The student population mushroomed from 200,000 in the fifties to over one million today (about 2 per cent of the Italian population are now on faculty lists). This decade alone enrolment has almost tripled.

The stabilization trend—as more sceptical academics call the decline—was most welcome at Rome University, considered Europe's most congested, where 28,000 freshmen registered, a drop of 11 per cent over the previous academic year and far short of the 40,000 new students envisaged.

However, the new enrolments still took the Rome "gulag" (as it has been nicknamed), originally built for 20,000 students, to the 198,000 mark.

According to demographers a principal reason for the decline in the student population is that Italy has reached the end of the post-war baby boom.

Professor Franco Ferrarotti, dean of the faculty of sociology at Rome University, argues that the decline may also be due to the greater difficulty of examinations, the widespread absenteeism from lectures (in some faculties as high as 90 per cent) and the complications of obtaining a final degree.

Students say the downward trend is part of a general disillusion with crowded university education and a growing realization that the once coveted *laurea* no longer guarantees jobs and financial rewards.

With hundreds of thousands of graduates out of work, submitting to rigorous study with no certainty of a reward at the end is becoming increasingly unpopular. According to a recent survey 45 per cent of Italian students now consider the *laurea* "almost useless".

A big share of the blame for this disillusion rests with the growth of a bureaucratic machinery, slow and inefficient, which accompanied the expansion of the mass university.

At the mass universities of R... and Milan last month the s... was chaos. Anxious fresh... wandered from group to g... seeking information about ap... tion forms, location of build... lecture halls and timetables. S... students were mobbed for a... Girls cried, boys raged when t... were told after spending hou... a queue they had joined the w... line.

At Rome's "university city" grey walls are splashed with p... cal slogans, plaster peels off ce... and murals, thick layers of ... are everywhere. The ch... complex of buildings, man... fabricated, ugly and un... native, have the aura of a re... camp.

Today many students from ... ent families who consider ... universities too congested and ... politicized climate unattractive ... joining private institutions.

This month's enrolment fi... also reveal a swing away ... medicine and jurisprudence, ... faculties which have tradition... absorbed the majority of students.

There was a healthy upsurge ... enrolment for agronomy and vete... nary science where there are ... good job prospects for graduates.

Another new trend was the r... to faculties like sociology, ph... sophy and political science.

Many students freely admit the... are selecting these faculties ... arm themselves academically ... the long class struggle against the establishment".

However, the new mass universi... ties are by their nature gradually weeding out their student popula... tion. In Milan (62,000), Naples (85,000) and Rome less than 50 per cent of students complete their courses.

The drop-out rate is even more dramatic in the smaller state uni... versities. Last month Palermo Uni... versity reported that only 10 per cent of its commerce students com... pleted their courses and only 15 ... per cent of economics studen... graduated.

At the same time private univer... sities, without giving details, a... mitted that applications had bee... "considerably higher" than la... year.

Europe

Lack of mobility blamed on too few incentives

from Guy Neave

PARIS

Lack of incentives is hindering the mobility of graduates, researchers and teaching staff between institutes of higher education in Europe, according to the Committee for Higher Education and Research of the Council of Europe.

The report reviews the situation of university staff exchange in some 13 countries and is part of a two-year project. It is intended to provide practical recommendations for the advancement of international academic exchange at the postgraduate level.

Among the recommendations is the creation of an information network to assist inter-university mobility. In the long term the report suggests there should be complete freedom of movement for graduate students across all European institutes of higher education.

In addition, the standing of teachers in higher education and research staff should be the subject of Europe-wide legislation.

Much university exchange traffic, says the report, still takes place between individual European countries and the United States. Many academics go to North America to round off their training, but comparatively few move across European frontiers. European research centres, the report notes, have not yet realized their potential in bringing together the European academic community.

Hence the report proposes that member countries undertake to centralize much of the information that would be of use to scholars proposing to study abroad. It also calls for greater attention to be paid to the publication of statistics on graduate and staff mobility in each country.

Information—or the lack of it—is not the only obstacle, however. Periods spent in foreign institutes, whether as an exchange teacher or as visiting Fellow, often do not count towards promotion. The Council of Europe recommends that such periods be recognized both in calculating seniority and estimating pension rights. Tenured staff should at the very least be certain of finding an equivalent post on their return to the home country even if they have been away for so long that their original job could not be kept open for them.

The report notes that many postgraduate student grants cannot be used for foreign travel and study abroad. This obstacle should be removed. Member states should make a special effort to ensure better coordination between institutes making grants for study leave.

Also included is a country-by-country analysis of the situation foreign students and researchers are likely to find on arrival. Britain, it appears, poses particular difficulties, especially because of lack of information about conditions of service.

On the controversial subject of student fees, which raised a host of objections in earlier reports sponsored by the EEC Commission into student mobility, the Council of Europe recognizes that it is unrealistic at present to press for their reduction. The report feels however, that eventually it ought to be possible to provide a "cut rate" for nationals coming from member states.

On the other hand

Dining far out

Do you ever tire of giving the family the same old "Ratatouille A La Greque de Nouveau avec legumes varieux"? Want to give them something just a little bit different? Why not try Amazonian smoked fish a la Barasana Indians of the Vaupés region of Colombia?

Yes? Well, move the herb rack aside and make room for *The Anthropologists' Cookbook*, edited by Jessica Kuper, which gathers together recipes brought back from all parts of the world. (Routledge and Kegan Paul £4.75.)

When it comes to cooking, people divide into two distinct groups: the stripped pine and herb garden group and the linoleum top and two veg group. I think this book will appeal to the former since they pride themselves on being adventurous. My Aunt Noreen, who is very much in the latter group, went to a continental cookery class back in 1959 and coq au vin has still not passed Uncle Ralph's lips.

No, it is definitely for the stripped pines this one and what better to give hubby after a hard day at the Arts Council than tripe cooked in banana leaves? ("just a little Trumai Indian recipe we found").

It is prepared as follows: "First, kill a wild pig, carry it back to the village and cut off the head, allowing the blood to run freely, then dismember the animal and place the pieces on a large meat smoker under which a quantity of wood has previously burned. The bristles will char immediately . . . eat the parts near the belly and ribs first as they rot fastest." It's Mrs Beeton with opportunities for violence really.

Ingredients listed in the book have a habit of starting out in Waitrose and ending up round a watering hole in Wola. To avoid disappointment check that you have all the necessary condiments before starting. There is nothing worse than getting down the salt, pepper and bay leaves only to discover that you are clean out of monkeys and Kumnu yams.

The book also includes the social niceties which go with the various dishes. For instance, among one tribe it is considered good manners when invited out for dinner *to* take the food home and eat it at your place—and you can see their *point*.

There are also strict rules as to what you may eat in certain mental states in some cultures. In the Upper Xinghu, for example, total abstinence is applied equally to those who have committed murder and those who have just had their ears pierced. "They lie in both cases in a hammock with their arms and legs straightened out."

From the book's wealth of detail on Bosnian coffee, Spanish pig preserve and snacks from Ghana, may I offer one quotation which conveys its flavour? It deals with what Aunt Noreen benightedly calls "rice pudding", but which in Eastern Sri Lanka is known as "pukkai" and is prepared ritually in a household shrine.

"The basic idea in a pongal (name of the rice pudding ceremony) is to heat the milk by itself over a brisk cow-dung fire until it swells up and bubbles over the side of the pot in a messy but nevertheless auspicious and pleasing wave of white froth. One of the best times to do this is exactly at dawn. . . . If you wish to receive the utmost metaphysical benefit from the milk rice then you are advised to proceed with a pongal ritual as outlined above."

If Uncle Ralph ever hears about this, then he is down to bananas and custard every night.

It's an English "boil in the bag" recipe
FAGE

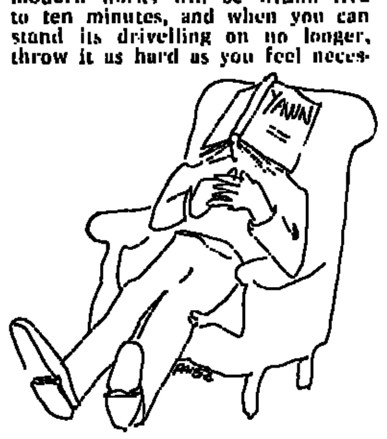
Christmas books

Now is the time of year when newspapers are full of suggested books for Christmas. An army of journalists and celebrities, never tired of giving us their opinions even now when all right-thinking people should be stirring Christmas puddings, trot out the titles which have impressed them most during the year.

In an age when people's capacity for writing endlessly on subjects that deserve at best one sentence is equalled only by the publishers' capacity to print them, every author must face his responsibility squarely. Every time he or she writes a sexy autobiographical novel about newspaper life or a complete illustrated history of two-tone doorbells or yet another book on tombstones or yet another on cats or *Prisons: Aren't They Dreadful?* by a team of *Guardian* experts, he she or they are committing the grave cultural sin of distracting attention from the handful of half decent books that humanity has so far managed to write. Ask yourself: do you owe it to the *Brothers Karamazov* to sell your typewriter?

First, we need some new critical vocabulary to deal with the deluge of unwanted verbiage that is thrust into our bookshops daily. Since the word "writing" no longer adequately covers it, may I suggest "Writepapering" which is a cross between "writing" and "wallpapering"?

Second, may I recommend a system of measuring the pap rating of whatever new book happens to come your way. Before starting, always weigh the book in ounces. Next, always read it in an open space or a large room. Give the book a reasonable chance to hold your interest and when it has palpably failed to do so, which with our modern works will be within five to ten minutes, and when you can stand its drivelling on no longer, throw it as hard as you feel necessary to abate your frustration and anger.



Then, using a tape measure—which is more essential than a bookmark nowadays—measure this distance. If you divide this figure by its weight you will arrive at what is technically known as its GDR (Garbage Dissatisfaction Rating). My all-time record was a "jolly sexy novel", as the blurb said, by one of our modern women writepaperers which I lobbed over 15 rows of the bandstand at St James's Park, giving a GDR of 112.

The only other work which has come anywhere near this was one co-authored by 27 people at *The Sunday Times*. It was thoroughly researched and was either about somebody who disappeared at sea or how to line cat baskets. In any case, it was something significant.

Finally, I would like to see legislation introduced to curb those who persist in churning this stuff out. While I would never condone the burning of books I can see that in some circumstances one would have to think seriously about burning certain authors. At the very least we must take urgent steps to see that those who molest the language of Milton and Shakespeare are strapped on a barrel and allowed to float wherever the Thames may take them.

Pip! Pip!

We now come to *The Social Impact of the Telephone* edited by Ithiel de Sola Pool and published at £11.20 by the Massachussetts Institute of Technology Press. To mark the 100th anniversary of Bell's invention the professor of political science at MIT has gathered 20 or so academic essays into the "first collective scholarly attempt to evaluate its impact".

Apparently, in 1905 one commentator wrote: "With a telephone in the house, a buggy in the barn and a rural mail box at the gate, the problem of how to keep the boys and girls on the farm is solved". As we now know this proved completely wrong, since the boys and girls merely phoned their friends, got on the buggy and scratched the mail box on their way out to stay with them in New York.

According to the book, "the telephone has changed the whole course of communications in the twentieth century. Well, yes of course, it has. One hundred years ago to sit alone in a room in Birmingham shouting at your old mother in Dulwich would have been thought exceptional.

Essays cover such subjects as "the telephone in literature", for example in Proust, in Joyce and in Carl Sandburg's seminal poem "Under a telephone pole" written in 1916.

My favourite essay deals with "interactional openings" and insightfully observes that on the telephone one is "denied visual access" to the person on the other end. The author—let us be charitable and call him that—examined hundreds of opening exchanges which he analyzed in depth.

For example: "Hello." "Hello Jim?" "Hi." "Hi, it's Bonnie." "Yeah, I know."

The author—I shall not name him because you have to consider the relatives comments: "Thus the 'upgraded' recognition claims appear to operate as the evidenced recognitions in allowing deletion of self-identification by the caller, and so shade into that class of turns after the presequence." Right, strap him to the barrel.

Bonnie, who is obviously on the telephone a lot, features again in a later and more complex chat which illustrates the "joke opening with intentionally incorrect identification and funny accent".

"Hello?" "Hello?" "Hello?" "Hello?" "Hi Bonnie." "Hi he hehhehheh hh." "He he he."

In fact, Bonnie sounds just the sort of woman I make strenuous efforts to avoid.

I accept that nobody has done a book on telephones before but do these authors really feel their insights justify book form? Still, to be positive, we could at least join all these recorded conversations together and sell it to *Crossroads* as dialogue.

Enter Sandy: "Hello mum." "Oh hello Sandy." "Is Kitty in?" "No I'm afraid not." "Hello Miss Parsons." "Hi Phil." "Good morning Bonnie." "Could I speak to Linda, please?" "Hi Sandy how's you?" "Byyeee."

The gay academic

Anything critical that one might say about *The Gay Academic* (ETC publications £11.20) will inevitably be shot down as sexist. If this book had been called the "Left-Footed Beekeeper" I would probably have said that it was a redundant work because left-footedness does not intrinsically affect the beekeeper's calling. I would then have added that while I have nothing whatever against left footedness—a lot of my best friends and so on—and while beekeeping is of immense importance to the healthy continuance of our civilization, I cannot see how yoking the two together, like coconuts and coleslaw, will help either.

In a perfect world homosexuality would be no more emotive a subject than beekeeping, but will this book do anything to help that happy day dawn? Who is it aimed at and what is it hoping to achieve?

If aimed at the gay world then it might just serve a purpose in giving a sense of solidarity, but I cannot believe that academics are not bright enough to work out the contents of this book for themselves. Also, I cannot believe that they will not reject many of its rather bland assumptions. For example, "departmental chairpersons who will not discuss gay writers as such . . . are obviously hostile to gays". Really?

If aimed at the "straight" world, will it fulfil editor Louie Crew's laudable intention of trying to "do away with stereotypes altogether (what is the pink cover of this book, adorned by Gay academic Socrates in period drapes, if not a stereotype?) and to respond to each gay person as a full and important individual".

To do this he collects collects 26 essays written by gay academics in Britain and the United States to show that "gay scholars are not new in any generation; that we come at all times and in all places; that we work in any discipline; and, perhaps most importantly, that we do not speak with one voice or style."

As a liberating principle this is fine, but as an anthology, it makes for bitty reading. Some of the authors visibly struggle to find a gay angle on chemistry or whatever their discipline is.

For instance, in "Towards a gay analysis of science and education" Stephen J. Risch finds himself talking for whole paragraphs at a time about science in China and plant pest research. To get his argument back on to gay tracks, he wrenches the sentences until you can hear them groan.

"The methodology and apparent objectives of science in China contrast sharply with that of science in the United States. While science in the United States serves the interests of a small elite class and only a privileged few enjoy the benefits of creative work, the Chinese are evolving a structure of science that serves the need of their entire society while at the same time involving the masses of people in the liberating activities of searching, recreating and inventing. Because it is well-known that China does not recognize gayness as a valid lifestyle, it may seem contradictory that we should consider their method of doing science as a possible method. . . ."

Homosexuality should be taken out of the closet, but should it be put on the esoteric shelf at the library?

Socrates: a gay academic

Delete and insert

Peter Wilby has never written a book. Although literate and readable, he, unlike so many of his weaker colleagues on *The Sunday Times*, has heroically refrained from doing anything that could be put between hard covers.

Of course, he has been tempted, as have we all. The doyen of Britain's education correspondents—he attended his 23rd National Union of Students conference last weekend which is some kind of record—he has on occasions been invited to clutter the world's bookshelves further with titles none of us is likely to read.

"Penguin asked me to do a chapter on students once. But they said it wasn't like E. P. Thompson's *History of The Working Classes* and so didn't publish it", he said.

Since that narrow escape, the only book Wilby has started was one at the NUS conference in Blackpool last weekend on the exact time when he would hear his one thousandth point of order. "I had heard 987 before this conference and so I knew there was a reasonable chance that I would hear my one thousandth. It was just a question of when. Very exciting."

Among the rich and crackling anecdotes that a weaker-willed person could put into book form is an account of how he once arrived at the conference hotel in Margate to find not a single light on. "The porter was sitting behind the reception desk next to a candle. He didn't say anything at first, but after prompting explained that the hotel has a special arrangement with the electricity board whereby if they did not use any by day they could have a cheap rate at night."

A doyen at only 33, he will, if he remains in the education saddle, attend approximately 77 more NUS conferences and hear about 3,850 points of order before he is put out to grass. Delightfully, he tells with relish how he has been out of the room for every major event at an NUS conference. "Remember when they threw Sir Keith Joseph out?" he said, smiling broadly. "I was at dinner."

He has—in an extremely competent way despite his rampant self-mockery—recorded for the nation how students have swung in the past decade from the Middle-of-the-road - I - come - here - for - the - parties - right - wing - left to the present ruling faction, the Extremely - unbelievably - I - was - almost - arrested - at - the - Garden - House - riots - Left.

Although he can see the humour of the NUS he has much respect for it. "Some absurdly solemn pieces are written about the NUS. Many of them by me. But I don't think it is treated seriously enough by the press at large. In many ways the NUS executive is now more important than the Oxford Union, because the balance of power has shifted and some of these people will be the trade union leaders of the future."

He smiled broadly once more. "If I had to choose one phrase to describe the atmosphere of NUS conferences, it would be 'Delete all and insert'", which would, among other things, make a very good title for a book.

Laymen and university government

Ralf Dahrendorf

One of the striking differences between the government of higher education in Britain and on the European continent is to be found in the involvement of laymen in the running of British universities. On the continent, university decision-making is in the hands of two instances: academics and their committees on the one hand, government and parliaments on the other. There is no intermediary—no University Grants Committee for example—nor does anybody who is not directly "legitimized" by political or academic groups play a part in the process.

In Britain, on the other hand, the influence of government is mediated in two ways. Government itself refrains in principle from taking a direct part in the government of universities (though much less so in that of other elements of tertiary education); and a third group, that of interested laymen, plays a major role in the "governing bodies" of academic institutions.

In many places, this major role is in fact a dominant role. Take LSE, for example. (It is of course an unusual example in more respects than one, and *inter alia* because it is a limited liability company, the governors of which are also its directors.) At LSE, we have a court of governors with nearly 100 members. Of these, eight are academics nominated by their Board, and six students nominated by the Union. A further 10 or so are nominated by various bodies, such as the senate of the University of London, the Inner London Education Authority, the LSE Society. This leaves about 75 "laymen", coopted by the court on the proposals of its standing committee.

In one way or another, this is a familiar story. Yet it is worth recounting in order to ask the question: why should this be so? Why should public funds be administered by a body which is self-perpetuating and consists of members who are not accountable to anybody? Why should the ultimate power of decision on matters concerning academic life rest with a body on which academics are in a minority? Indeed, should this be so?

There are clearly behind the notion of lay involvement in the government of institutions some splendid, if possibly anachronistic ideas, eighteenth century ideas in fact. Decisions are best made by people who exercise their common sense rather than any particular expertise; indeed it is a matter of importance that specialist claims are checked by the longer view of those who have no vested interest, but merely the interest of a more general public at heart. This is, at the same time, a liberal view in the traditional sense of the word.

Common sense and the public interest are, in this view, not necessarily represented by government (although representative government too is based on some such notion of common sense and public opinion); they are best represented by the public itself in the form of "lay" representatives who express their views with sympathetic interest and such information as can be generally understood. In sum, lay government in this understanding is a method of preventing error and dogma, one-sideness and dependence.

There are many questions which must be raised today about such a notion. The first of these relates to common sense and the public itself. Jürgen Habermas, among many others, has pointed out that the eighteenth century public has undergone significant changes, indeed that it probably no longer exists, and that with its demise the idea of common sense has become a benign fiction rather than a reality.

For one thing, the public has increased in size to such an extent that the assumption of equal participation has become spurious. It is no accident that the Treasury and others keep lists of the good and the great who are eligible for serving on commissions and elsewhere. Lay governors of academic institutions are hardly a cross-section of the electorate.

Nor is this only a function of size. It is understood today that lay participation in decision-making requires a kind of elevated, or at any rate educated common sense. The worker on a board would have to go through training courses, or considerable experience in other positions to be effective. Lay governors of educational institutions are not simply members of the public; they are informed members. There are many governors of LSE who were themselves students at the School, or members of its staff; there are few for whom a university was an entirely new discovery when they were appointed.

Then there is another set of changes. The assumption that "the public" in its laconic singular is still a reality, has rightly been challenged. People do not participate in social and political life as undivided individuals, as "mere" citizens. The social division of labour has subdivided our lives into numerous allegiances, and numerous competing or complementary groups in society reflect this fact.

"The public" in our world consists of parties and interest groups, of professions and organizations, of sectoral interests throughout. The temptation is great therefore to argue in coopting "laymen" that one needs another woman, trade unionist, lawyer, conservative, and so on. It is clear that once this happens, the "laymen" deserve their quotation marks: the lay public is reconstituted, so to speak, by a deliberate combination of specialisms; it is not the individual member, but the whole governing body which may be said to represent the public interest.

It would not be difficult to derive from such considerations a fairly good case against the present form of lay government of universities. But it is equally necessary and in fact easier to make such a case against the alternatives, that is, direct government, and academic self-government. I have discussed university autonomy on several previous occasions in these columns. May I confine myself to stating that while there is clearly a public interest in institutions which are financed by taxpayers, any attempt to express this interest by direct rule is bound to damage the very objectives which it is designed to serve. A combination of UGC-type intermediaries and direct public representation on governing bodies is clearly preferable.

The case against total academic self-government is a more difficult one. It has to do with the public interest to which I just referred: as teachers and scholars, academics may well be the best judges of what should be done; as citizens of their institutions, however, they have their own vested interests, interests at any rate that need to be tempered somehow. Moreover, they tend to get enmeshed in their own sectional concerns within academic institutions and need outside advice to find a sensible way out. Neither teachers nor students nor any other group is as such an effective reminder of the needs of the institution as a whole.

Moreover, the boundaries between academic institutions and the outside world tend to be high; the need to cross them occasionally, or at any rate to talk to those on the other side is considerable. It is along these lines that I would argue against unchecked academic self government.

The balance of this argument is, I suppose, a "yes" to lay participation in the government of academic institutions, and even to a lay majority on their governing bodies. However, there are at least three provisos to this conclusion.

One is, that lay governors must take great care not to interfere with academic affairs proper, that is teaching and research and the judgments of quality that go with it. Lay interference in these areas is as detrimental as government interference. Secondly, lay governors must realize that the public interest which they are supposed to represent is not necessarily identical with the vested interests of academics but it is not necessarily identical with that of the government of the day either.

In both cases, a difficult balance has to be struck between understanding and detachment. This of course is partly a matter of attitudes on which it is notoriously difficult to legislate. But it is also a matter of the composition of the lay element in university government. And here—this is my third proviso—it seems important to me that while some sort of overall balance is sought, we hold on to one of the distinctive assumptions of British social life that balance is not necessarily to be found in the proportional representation of all relevant groups, but that informed and sympathetic individuals can go a long way towards bringing it about.

NOTICE BOARD

Chairs

Dr Frederick Stone, consultant in child psychiatry at the Royal Hospital for Sick Children, Glasgow honorary clinical lecturer in child psychiatry in the University of Glasgow and the visiting consultant to Notre Dame Child Guidance Clinic and Unit for Adolescents, has been appointed to the new chair of child and adolescent psychiatry in the University of Glasgow.

Mr Robert Jack, a partner in the firm of McGrigor, Donald & Co, Solicitors, Glasgow, since 1957, has been appointed to the chair of mercantile law in the University of Glasgow. He will succeed Professor J. Bennett Miller who retired in 1976.

Dr G. M. Stephenson, at present reader in psychology at the University of Nottingham, has been promoted to the chair in social psychology at the University of Kent, Canterbury, from January 1.

COURSES

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Appointments

Universities

Aberdeen

Promotion to senior lecturer: Amédée Ah-See (surgery). Lecturer: Janet Cornelius (haematology). Lecturer on probation: Brian K. Drakeley (engineering). Temporary lecturer: Richard G. Rodway (agriculture). Visiting lecturer: Wilson M. Ngoka (obstetrics and gynaecology). Research Officer—Physicist/Electronic Engineer: William A. Edelstein (bio-medical physics and bio-engineering). Visiting fellow: L. G. Brown (mathematics). Research fellows: William T. Melvin (biochemistry); Harry C. Wesson (chemistry); Kazimierz Wisniewski (mathematics); I. Damole (obstetrics and gynaecology); John S. Kennedy (political economy); Margaret Thomson (social work); K. Ngole (therapeutics and clinical pharmacology); R. W. Furness (zoology); Slawomir Kadulski (zoology); Alexander T. McKnight (unit for research on addictive drugs). Research assistants: Patricia M. Duff and Marion J. Russell (biochemistry); Rosalind A. Meldrum (bio-medical physics and bio-engineering); Wilson A. Crichton (engineering); Byron B. Basset (forestry); Judith H. Robertson (pathology); Hilary C. Shelton (political economy); Margaret V. Wilson (sociology); Mark Kibblewhite (soil science); Donald J. Tweedie (surgery); Linda E. Robson (unit for research on addictive drugs).

Bath

Lecturers: Dr S. E. Reynolds (biological sciences); Dr W. H. Scott (school of education).

University College, Cardiff

Senior lecturer: D. Pedrill (accountancy and financial control). Lecturers: A. T. Lewis and C. R. Unsworth (law); Dr J. A. Matthews (geography); Dr Peter Williams (inorganic chemistry); U. Hobson (home economics); Teresa M. Jarvis (anatomy); Sub librarian: C. W. Smith (applied sciences library); J. L. Allen (science library).

East Anglia

General administrator of the Sainsbury Centre: G. M. Marshall. Lecturers: L. W. Barrow, A. H. White and L. M. Gillman (English and American studies); M. P. Atkinson (computing studies); Rayah Feldman and Hussein Ramazanoglu (development studies); George Blazyca, Vincent Geoghegan, Shaun P. Hargreaves-Heap, P. K. Lawrence, M. J. Prior and James Wyllie (economic and social studies); K. H. Tschachler (European studies); Beverley Labbett (centre for applied research in education); Research associate: Lesli Good (biological sciences). Part-time assistant director: Anne Patricia Miles (physical recreation).

Heriot-Watt

The following have had the title of professor emeritus conferred upon them: Ralph Cowan, formerly professor and head of the joining department of architecture of Heriot-Watt University and Edinburgh College of Art; Dr Anna MacLeod, formerly professor of brewing in the department of brewing and biological sciences at Heriot-Watt University. Lecturers: W. M. Kerr (accountancy and finance); D. K. Mackbeth and J. D. Stewart (business organization); Wendy Philipson (languages). Pfizer research fellow: A. Henderson (chemistry). Research associates: M. R. Hogson (building); Valli Shirley (biological sciences); E. J. Ryan (chemical and process engineering); V. B. Jigajinni (chemistry); R. W. Lyon and P. O'Callaghan (electrical and electronic engineering); R. L. Alwood (Institute of Offshore Engineering); L. S. Leong (mechanical engineering); R. McGlashan and Linda Varo (petroleum engineering). Research engineers: A. M. Lyon (Institute of Offshore Engineering); C. McLeod (petroleum engineering). Deputy librarian: M. J. Wills.

Goldsmiths' College, London

Registrar: Stanley D. Leedam.

University College, Swansea

Lecturers: M. E. Loveridge (English language and literature); N. Baigent (economics); A. C. Twelvetrees (social policy and social work); P. W. Grant (computer science); P. Styles (geology); P. A. Tyler (oceanography). Temporary lecturers: N. H. Potter (English language and literature), A. H. Rees (economics).

Colleges

Dundee College of Technology

Head of civil engineering department: Dr S. Sarkar.

General

Brenda G. Watson has been appointed as assistant director of the Farmington Institute for Christian Studies in Oxford.

The appointments of seven Regional Manpower Services directors for England have been approved by Mr Booth, the Secretary of State for Employment with effect from December 1, 1977. The directors are: D. W. G. Hill (Northern), D. Rees (North West), D. G. Knight (Yorkshire and Humberside), L. R. Frost (South West), G. S. Forrest (Midlands), M. Hanson (London), M. J. Porter (South East).

Forthcoming events

"William Morris, Artist and Socialist", the second Hoffman Wood lecture on "The meaning of Victorian architecture", will be delivered by Professor Paul Thompson, Hoffman Wood Professor of architecture on January 26 in the Rupert Beckett Lecture Theatre of Leeds University.

* * *

"Origins of the European Community—progress and prospects?" the eighth annual conference of the University Association for Contemporary European Studies in conjunction with the department of politics at the University of Warwick, will be from January 3-5 at the university. Fee: Members, £15, non-resident, £6.50. Non-members, £20, non-resident, £9.50. Further information from Eva Evans, UACES Secretariat, 12A Maddox Street, London W1R 9PL.

* * *

"Improving Your Lecturing", a workshop organized by the University Teaching Methods Unit, will be held from January 4-6 at the Institute of Education, in Bedford Way, London WC1. Fee; £27.50. UTMU is also holding a series of six to eight-week study groups: "Problems-solving in higher education" beginning January 17 on Tuesday evenings costs £7.50; "Students—the personal and social context of Learning" beginning January 19, on Thursday evenings costs £7.50; "A group experience" on January 16 and thereafter every Monday evening costs £10. Details from Gwen Heath, UTMU, 55 Gordon Square, London WC1H 0NU.

* * *

"Computer-assisted learning—claims and reality", by Richard Hooper, director, National Development Programme in Computer Assisted Learning the second seminar on computers in education organized by CEDAR (Computers in Education As a Resource), will be held at 2.30 pm in the lecture theatre, 145 Imperial College, Huxley Building, 180 Queen's Gate, London, SW7, on December 14. Details from Nick Rushby, CEDAR Project, Imperial College, Computer Centre.

Open University programmes December

Sunday December 11

BBC 2

0.55 • Open Forum—26: Open Discussion on O.U. topics.
10.55 • The pre-school child: Joining in (P911, prog 4).

RADIO 4 (VHF)

0.10 • Introduction to S100 (science foundation course) (S100, prog X).
0.30 • Associate Student Programme (II).
10.00 • O.U. Announcements/music (II).
10.10 • The first years of life: As the Twig is Bent (P911, prog 4).

Friday December 16

RADIO 3 (VHF)

18.30 • Associate Student programme (2).
19.00 • O.U. Announcements/music bil.

Recent publications

The seventh edition of *The Schools Council Projects Profiles and Index 1977-79* has been published. It will in future be issued every two years instead of annually. A bi-monthly bulletin *Project News* which gives details of new developments as they arise will be issued to holders of the index (copies available from Information Section of the Schools Council, price £3.50).

Noticeboard is compiled by Patricia Santinelli and Mila Goldie

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Master navigator on sea of history

PROFILE

Peter Scott talks to Fernand Braudel the great historian and shaper of modern French social sciences

Fernand Braudel is a great historian, a twentieth-century Edward Gibbon still actively engaged in scholarship at the age of 78. He is also a powerful, even venerable, symbol of a whole approach to history, the school of *Annales*, the historical journal founded in 1929 by Marc Bloch and Lucien Febvre. Finally, he is a great institution-builder who has shaped in a decisive way the development not only of history but of all the social sciences in France during the past generation.

In Britain and America he is probably best known for the first of these achievements and least known for the last. In France the order is the reverse — which indicates a great deal about the different conceptions of history popular on opposite shores of the Channel.

In the Anglo-Saxon world Braudel is respected above all as the author of *The Mediterranean and the Mediterranean World in the Age of Philip II* published in France in 1949. When it was belatedly translated into English in 1972, it enjoyed a success that spread beyond the circle of professional historians — a significant achievement for a book of over 1,300 pages into which Philip II does not make a convincing entry until about page 900. It has even been published in paperback.

The comparison with Gibbon is not as inappropriate as it seems at first. Although *The Decline and Fall of the Roman Empire*, with its tightly packed and rhetorically written narrative seems an example of the *histoire événementielle* that Braudel and the whole *Annales* school despise, *The Mediterranean* too is a work of Gibbonesque grandeur. Like *The Decline and Fall* it can be criticized in details but in its conception it is beyond comparison.

Outside the relatively small number of British and American historians who have accepted and absorbed the *Annales* approach Fernand Braudel is probably most *respected* in the Anglo-Saxon world as the author of a historical classic. Many historians like *The Mediterranean* in spite of its roots in the *Annales* tradition, a school of history with a sharp social sciences edge which is bound to be less popular in a country where history is always placed among the humanities.

Others like *The Mediterranean* itself but remain unconvinced about the benefit of applying the more theoretical assumptions of *Annales* to the very different British historiographical traditions. This ambivalence was demonstrated by the reception of Braudel's later work, the first volume of *Capitalism and Material Life 1400-1800* published in France in 1967. Here was a work more fully in the *Annales* tradition. Yet although it was well received, it was without the whole-hearted enthusiasm that had greeted *The Mediterranean*.

In France Braudel's reputation is different. There *The Mediterranean* does not bulk so large in his overall achievement. It is as the successor of Marc Bloch, who was shot by the Germans in 1944, and the collaborator and friends of Lucian Febvre, who died in 1956, and now as the almost spiritual leader of the *Annales* tradition—he ceased to be editorial director of the journal in 1968—that Braudel is respected there.

More practically he is also respected as an academic *patron*, a man who for a generation pulled the wires that made the social sciences in general, and historical research in particular, dance in France. When Lucien Febvre died Braudel succeeded him not only as editor of *Annales* but, more important, as president of the VIe section of the *Ecole pratique des hautes études*. Although the sixth section is concerned formally with economics and the other social sciences its president has always been a historian, a demonstration of the place of history as queen of the social sciences in France—a place won by Bloch, Febvre and Braudel over the past 50 years.

Braudel and the *Annalistes* see history not only as a social science but as an objective science. So within the sixth section they have another and more exclusive base, the *Centre des recherches historiques* which they are not ashamed to call a laboratory. Professor Braudel is no longer president of the sixth section or director of the centre, offices which have passed into younger hands.

Yet like King Lear he was restless after his abdication. Unlike Lear he has gone on to build new and more powerful institutions. He is now chief administrator of the *Maison des sciences de l'homme*, a modern nine-storey building in the Boulevard Raspail built on the site of the prison in which Dreyfus was held. This acts as an umbrella for a variety of research institutions, including the sixth section, and also as an institutional home for academic loners like professors at the *Collège de France*.

So any assessment of his achievement has to take place on two levels: on the personal level of Braudel as a man and as a historian, and on the level of the intellectual tradition of *Annales* which he first embraced, then helped to mould in a decisive way, and finally entrenched in powerful institutions at the heart of France's academic life.

Fernand Braudel was born in 1902 in Lorraine, far from the Mediterranean which was later to become the ruling passion in his life. "I was in the beginning and I remain today a historian of peasant stock", he says. "I could name the plants and trees of that village in eastern France; I knew each of its inhabitants; I watched them at work: the blacksmith, the cartwright, the woodcutters. And because all this countryside of eastern France is full of military recollections I was a child at Napoleon's side at Austerlitz, at the Berezina."

In 1908 his family moved to the village of Mériel on the outskirts of Paris and from 1913 to 1920 he attended the *Lycée Voltaire*. His father was a mathematician and the young Braudel's first ambition was to become a doctor, but he was dissuaded by his family. Instead he studied history at the Sorbonne from which he graduated "without difficulty but also without much real enjoyment".

At the age of 21 he took his first job, as a history teacher in the *lycée* at Constantine in Algeria. He remained in North Africa for the next 10 years except for a brief interlude of military service in the still-occupied Rhineland in 1925-26. His love for the Mediterranean was already awakening. His first article, published in 1928, was on the Spaniards and North Africa. Indeed the first outline of his masterwork *The Mediterranean* took shape in his mind even earlier.

Moulding forces

The order in which the various intellectual ingredients were added to *The Mediterranean* is perhaps important. First came Braudel's love for the sea and its region: then his intention to write a history of the Mediterranean policy of Philip II, a work of *histoire événementielle* of which the traditionalists who still held sway at the Sorbonne would have entirely approved. Only later was his concept transmogrified by his contact with the "anti-history" school of the *Annales*.

The man who above all others brought about this change was the man to whom Braudel dedicated *The Mediterranean*, Lucien Febvre, co-founder of *Annales* and author of the classic, *Le problème de l'incroyance*, which sadly has never been translated into English. There were, of course, other influential figures in the intellectual development of Fernand Braudel. Among them was Henri Pirenne who came to Algeria to lecture in 1931. But it was Lucien Febvre who moulded an unknown *Sorbonniste* into a famous *Annaliste*.

Naturally Braudel's own research contributed to the decline in his interest in old-style political history. He recalls: "I still remember my delight in discovering the marvellous register of Ragusa in Dubrovnik in 1934. At last here were ships, bills of lading, trade goods, insurance rates, business deals. For the first time I saw the Mediterranean of the sixteenth century."

Yet Febvre had a quite decisive influence on the young Braudel. He himself, in a review of *The Mediterranean* published in the *Revue historique* in 1950, told how Braudel had originally intended to write about Philip II and the Mediterranean. Febvre dissuaded him. "A good subject", he wrote. "But why not the Mediterranean and Philip II? A subject far greater still."

The beginning of their long friendship and collaboration can be dated precisely. In 1935 Braudel took a new job lecturing in the university at São Paulo in Brazil. Returning to Europe by boat from Santos in the autumn of 1937 he met Febvre, not for the first time, but during the 20 days of the voyage Braudel admits that he became "a little like a son" to him.

Back in France he plunged into academic life under the patronage of Febvre. It was at Souget, Febvre's house in the Jura, that he started to write *The Mediterranean* in the summer of 1939, "at the close of the dazzling early period of the *Annales*", as he wrote 10 years later.

Perhaps the most extraordinary fact about *The Mediterranean* is the adverse conditions under which it was written. In 1940 Braudel who was serving on the Rhine frontier was captured by the Germans. He spent the next five years in prisoner of war camps, first at Mainz and then at Lübeck. It was during these years that *The Mediterranean* was written out slowly and laboriously and from memory in school exercise books which were sent back to Febvre in France.

Braudel admits that had it not been for his imprisonment he would have written a very different book. It would have been different not only because he could have checked his sources more easily or carried out more research but also because the despair and pessimism that any sensitive man would have felt during those terrible years has seeped through into the very conception of the book.

He explained: "Events were too full of despair. From *temps court* to pass to *temps less court* and to *temps* very long such an operation has something in it to tempt the historian." So it was natural that he should retreat from the surface events of history, which in the years of the war were so terrible, and concentrate instead on those features of human existence that change only slowly or hardly at all, those features that already existed centuries before Hitler was born and would exist for centuries after his death.

"My vision of history took form, partly as a direct intellectual response to a spectacle—the Mediterranean—which no traditional historical account seemed to me to be able to encompass, and partly as an existential response to the tragic times I was passing through", Professor Braudel added. "Down with occurrences! I had to believe that history, destiny, was written at a much more profound level."

So by 1945 when he returned from captivity Braudel's intellectual formation was complete. The boy in eastern France at the beginning of the century who had perhaps instinctively felt that the lives of woodcutters and cartwrights were more truly history than the glories of Austerlitz or the calamities of the Berezina, had had his mind formed by the theoretical propositions of Bloch and Febvre and his emotions moulded by the years of Nazi tyranny.

In his preface to *The Mediterranean* he wrote: "The basic problem confronting every historical undertaking is how simultaneously to convey both that conspicuous history that holds our attention by its continual and dramatic changes—and that other submerged history, almost silent and always discreet, virtually unsuspected either by its observers or its participants, a history that is little touched by the obstinate erosion of time."

His critics argue that this is a problem that Braudel himself has never solved. How can what changes quickly be linked with what changes only slowly in a common historiography? Nearly all the criticisms of *The Mediterranean* concentrate on this point. Even a fellow, if younger, *Annaliste*, the medievalist, Jacques le Goff, has written: "The political history is relegated to part three which far from being the culmination of the work is more like the bits and pieces left over . . . an atrophied appendix."

The American historian, J. H. Hexter, has been more harsh. "One cannot bring the course of political events into effective relation with the more durable and patterned phenomena of history by tacking a tired Sorbonne *thèse* (intellectual vintage of 1925) on to a lively collection of *Annales enquêtes*."

Braudel himself repudiates the charge. "I lived for 50 years with Philip II. I saw him so often—every day—that I understand him. If I understand him, I excuse him. Because I excuse him, I begin to argue with him." Yet in spite of all this Philip remains a shadowy figure in *The Mediterranean* who is brought to life far less effectively than the shepherds of the Abruzzi. Another indication of Braudel's comparative indifference is that although he made extensive revisions to parts one and two between the first edition of 1949 and the second of 1966, part three—"Events, Politics and People"—remained untouched.

Capturing the past

At bottom, one suspects, if Braudel has to choose between describing adequately surface events and the deep subterranean tides of history he will always choose the latter. In a lecture at The Johns Hopkins University last year he said: "I think mankind is more than waist deep in daily routine, countless inherited acts, accumulated pell-mell and repeated time after time to this very day, that become habits that help us to live, imprison us and make decisions for us throughout our lives."

"Ancient, yet still alive, this multi-centuried past flows into the present like the Amazon pouring into the Atlantic Ocean the vast flood of its cloudy waters."

It is this multi-centuried past that Braudel seeks to capture in his later work *Capitalism and Material Life 1400-1800*, at least in its economic aspect. So far the first of three volumes has been published and translated into English; the final two are already complete and should be published shortly. Just as in *The Mediterranean* political events are treated as a small, and even insignificant, superstructure on the foundations of deeper historical change, so in *Capitalism* money, towns and capitalism itself are treated as almost an excrescence on "material life", the age-old balance or imbalance between people and food.

Capitalism is perhaps more *Annaliste* than *Braudellien*. Unlike *The Mediterranean* it is a work of the head not of the heart. Its historical focus, too, is more fuzzy, stretching over at least four centuries rather than concentrating on the political apogee of the Mediterranean. Its geographical focus also is fuzzy with examples drawn from Mexico to China and from Irkutsk to Istanbul. Above all, it suffers because Lucien Febvre never wrote its intended companion on "Western Thought and Belief 1400-1800".

Yet in Braudel's defence it must be asked who else has attempted to write a comprehensive economic account—history seems too narrow a word—of the pre-industrial world. It must also be emphasized that those features of *Capitalism* which may seem blemishes on this side of the Channel are regarded more positively on the other.

Capitalism is in many ways a typical work of the *Annales* school which illustrates well the strengths and weaknesses of that particular historiographical tradition. First, it strives to present "total" history—in time by refusing to confine its theme or its examples to a narrow historical period, in space by taking many illustrations from the non-European world (which in any case comes naturally to Braudel with his North African and South American experiences), and most important of all in conception by refusing to allow a narrow or capricious definition of history to confine its scope. So there are frequent raids into what many English historians would regard as more properly the territory of sociologists, geographers and anthropologists.

Secondly—and paradoxically in view of the early work of Bloch and Febvre—the *Annales* school has come to concentrate more and more on social and particularly economic history. In the 1920s and 1930s the *Annales* historians were concerned above all with how people thought and felt. Thus Bloch's *Les Rois Thaumaturges* published in 1923 attempted to pene-

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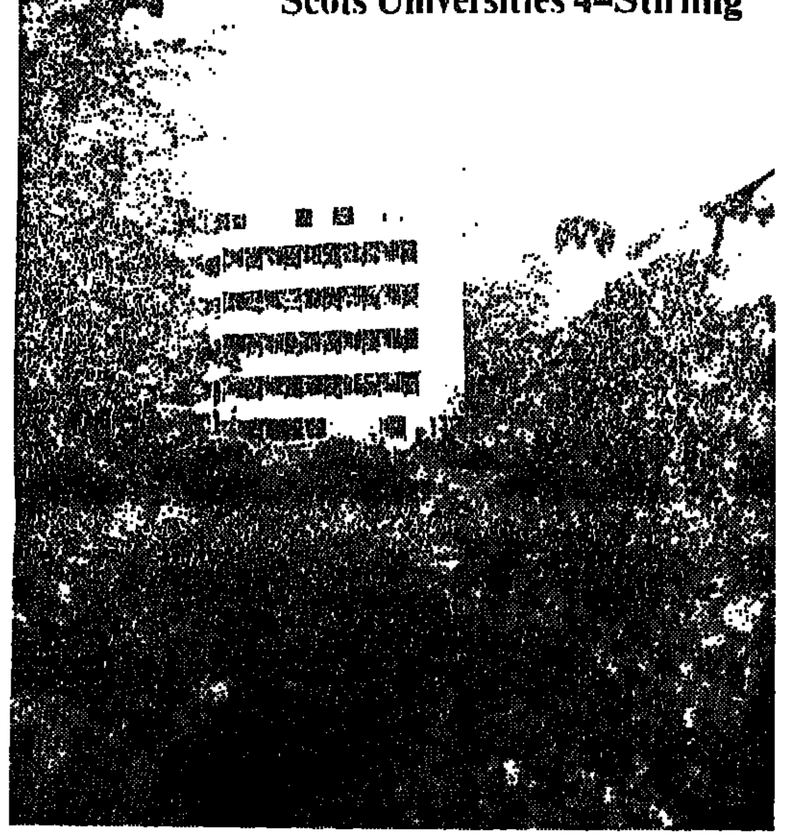
Symbolic turning point reached on tenth birthday

Scots Universities 4—Stirling



The innovations policy has begun to pay dividends.

Stirling University's tenth anniversary this semester coincides with its highest ever admission figures, a 35 per cent increase in applicants making Stirling their first choice and a rise in overall applications 10 per cent above the national average.

Such statistics put the university well on the way to achieving its target figure of 3,300 by 1981-82. They are interpreted by local head teachers as a reflection of its growing academic reputation and by the administration as a welcome sign that the albatross effect of the Queen's visit in 1972 is ceasing to influence admissions. They have provided a symbolic turning point in university morale after five years during which self-confidence suffered on a number of accounts.

Some of the new courses which have won through over the past year or two in the teeth of library and staffing economies indicate a turn in the tide of "creeping departmentalism", noted by Peter Wilby (*THES* May 21, 1976) which threatened to erode the prized flexibility of Stirling's degree system.

Courses in political studies, earth and environmental science, folk-life studies and the northern renaissance each involve several different departments and there is evidence that 30 to 40 per cent of first year students choose combinations which cross traditional faculty barriers. Joint honours degrees in English with biology or psychology are not uncommon.

Stirling, with all the Scottish universities, shares and rejects accusations of lack of contact with Scottish society and development. The criticism is reinforced by the beautiful but isolated English-type campus; it may have the most successful vacation letting programme of any British university, but is far removed from the "tounis college" image projected by the older universities in a country keenly responsive to the pull of academic tradition.

However, Professor T. A. Dunn claims for the department of English studies—where Norman McCaig is reader in poetry—a distinctive place in the writing and evaluation of Scottish literature. A failed attempt to introduce Gaelic has been balanced by the introduction of Scottish studies, another interdisciplinary subject.

Research of direct practical application to Scotland includes three different, oil-related studies, much sociological investigation and work on seed technology and upland farming. The unit of aquatic pathobiology has played a key role in the national boom in fish farming and now provides a diagnostic and husbandry service for the entire industry as well as contributing substantially to the spread of aquaculture in underdeveloped countries.

It is noticeable that the career-oriented subjects, particularly biology, and accountancy and business law, have shown a marked proportional gain in students over English, sociology and history, the barons of the early years.

Apart from the semester system, integral to the flexibility of the Stirling degree, and which survives with the support of staff and students alike, two major innovations distinguished the university from the start: a degree in education, taken concurrently with other subjects, and courses in industrial science and technological economics, both planned as direct commitments to community development.

The university produced 52 graduate teachers in January, the majority of whom were immediately absorbed by Central Region and West of Scotland schools. Local head teachers, experienced with students on teaching practice, have much to say in favour of the system which spreads teacher training over the whole of a university career.

The response from local industry to the department now called management science and technology studies has been on the whole disappointing, with little take-up of the industrial projects unit's consultative expertise, which is increasingly called upon for international projects, including studies on technology transfer and information science for the Organization for Economic Cooperation and Development and the United Nations. The shortage of graduates attracted to this department is partly explained by the lack of applied sciences taught and negotiations have begun towards establishing outside engineering qualifications as a component part of a wider degree programme.

Local industry has, on the other hand, been eager to supply practical experience for MSc students whose course, though comparable to others available at Strathclyde, Lancaster and elsewhere, is unique in its mixing of technologies with the emphasis on economics.

A recent EEC case study of the links between six new European universities and their regions claims for Stirling "a programme of cultural development within the region that has no equal among the other five". The university is alone in Britain in setting aside 1 per cent of its un-earmarked annual income, about £43,000, for a separately administered cultural focus for its region; the MacRobert Centre, and the Gannochy sports complex, which places a special emphasis on community sport, are between them estimated to bring more than 110,000 people a year to the campus.

Despite the economic disadvantages the university has benefited in one respect from beginning at the end of the post-Robbins period of expansion. Its own peak growth period, coinciding with the time of maximum competition for academic posts, has ensured the maintenance of an outstandingly high calibre of undergraduate teaching and several departments have begun to establish an international reputation for themselves.

Final year English honours dissertations whose ride range of options ensures that teaching is linked to lecturers' real interests, are consistently praised by external examiners. The department of psychology, one of the largest in the United Kingdom, has attracted unusually heavy grants for research which ranges from the play needs of handicapped children to a life science project for the first European Spacelab mission in 1980.

To remain innovatory, but not simply for the sake of novelty is one of principal Dr W. A. Cramond's expressed hopes. As one senior lecturer put it: "We accept that we have made contributions. It would be unreasonable to expect a small university to overcome in 10 years the problems that have been facing others for centuries. The full measure of Stirling's success or failure only the future can judge."

Juliet Clough

EFL teaching enjoys publishing link-up

Hard times are forcing universities to seek new sources of income. One of the latest examples is a joint venture set up last summer by Reading University's Centre for Applied Language Studies and Longman's English Teaching Services division to double their output.

The initiative was Longman's, but it coincided with Reading's own ambitions. The publishing house has put £25,000 into Reading's centre which its staff will use to develop teacher-training. In this way the centre will eventually have double its staff and students.

Mr David Mortimer, managing director of Longman's English Teaching Services, said Longman's, the main producers of EFL (English as a Foreign Language) material, wanted to see a centre set up for training predominantly non-British teachers of the subject.

There were plenty of centres for training British EFL teachers, he said, but demand was increasing, particularly from developing countries, for teacher training. Facilities in Britain could no longer meet it and there was a danger that the United States would fill the gap.

Secondly, there was a feeling at Longman's that the standard of teacher training offered in this country had not kept pace with the growth in the subject. The problem, he explained, was that Longman's had no experience of running a management centre, and anything it tried would be labelled "commercial". A university would give such a centre respectability and academic independence.

Reading was picked because it is near to London and already has an EFL centre, where teacher-training is a long-term aim.

The centre at Reading was set up in 1974 as a unit attached to the department of linguistics. Mr D. A. Wilkins, the director, said the idea was to have a centre for language teaching which would eventually also provide courses for research. The language courses would provide an on-the-spot practical context for teacher training.

So Longman's approach brought their long-term plans forward. In other ways, too, the centre was ideally suited to the project. It is financially quite independent of the university. It pays for its own six full-time staff (not including the director), who are treated as other university staff in all but security of tenure. They have three-year contracts.

It is not only self-financing (income is primarily from student fees for the EFL courses) but also puts several thousand pounds back into the university budget. The surplus means that staff do not have to devote all their time to teaching; they can do on research.

Since it was first mooted, however, the project has expanded. The publisher's contribution is now about one quarter, because the university has decided to build a new centre for applied languages, which will house not only the new project but also all the university's language teaching facilities. It should be ready by next October.

The new building will cater for a doubling in staff numbers over the next three to four years. Already a director of studies, Mr Ron White, has been appointed. Students, who at present represent 1,200 units (that is, one student for a week) over the year, will also increase.

Income next year is expected to be £109,000: £51,000 from the teacher/training courses and £58,000 from the ELT courses.

Both the university and Longman's are adamant that there are no conditions about the use of Longman's materials or constraints on the use of other publishers' materials.

One problem is high fees; at present, they are about £60 a week, not including accommodation, which inevitably discriminates in favour of students from richer countries. The centre is not, however, entirely dependent on fee income; last year the Royal Society of Arts gave £2,000, and the Cambridge University Press contributed to the production of a textbook.

Frances Gibb

Master guide to sea of history

continued from preceding page

trate the widespread medieval belief that the King could cure scrofula by touching the sufferer, and Febvre's *Le problème de l'incroyance* tried to examine the extent to which a seventeenth-century man could be an unbeliever.

But later the focus of interest and activity changed. The wider social issues raised by man in the mass moved closer to the centre of the *Annales* stage, first with Bloch's *La société féodale* and then Braudel's *Mediterranean*. In the past 20 years this tendency to emphasize man as a social and economic being has increased. Braudel himself has been a key figure in this important modification of the *Annales* tradition.

It is perhaps not simply the accident of death that left Febvre's book on thought and belief unwritten and Braudel's on capitalism and material life complete. It may indicate in an over-simple but nevertheless neat way what has happened to this historiographic tradition since *Annales* was first published 48 years ago. The end of the *Annalistes* may remain the illumination of *mentalités* but their means have become increasingly statistical and even mechanistic.

Third is their ambivalence about ideology. For the *Annalistes* man is subject to great and powerful forces outside himself, the climate, famine, disease. Yet they are not determinists: man also plays an active role in the working out of his destiny. Indeed, it is precisely this interaction between man's will and his environment that excites them most. But this leaves a vacuum: the great events celebrated by more traditional histories fade into the background in the perspective of the *Annalistes*; the battle of Lepanto in 1578 is almost an incidental event in *The Mediterranean*. But they do not offer in their place a grand ideological scheme as the Marxists do.

However, this ambivalence, this lack of dogmatism, is regarded as a virtue by Braudel himself. "In my books I have now and then opened a window on to landscapes that are but dimly visible, but one window is not enough", he says. "At the risk of being accused of impenitent liberalism I say that in order to mount the multiple thresholds of history all the doors seem to me to be good. None of us knows them all. At first the historian opens the door on to the past he is most familiar with. But if he wants to see as far as possible he has to knock on another door, and then another."

This helps to explain the success, indeed the near-total victory, of the *Annalistes* in French historiography. In 1929 Bloch and Febvre were radicals, the leaders of a new school of "anti-history"; their opponents were the *Sorbonnistes* whose commitment to traditional political history still ruled the taste of French historians; *Annales* was a polemical weapon in this often bitter struggle.

Yet the insurgents won and the establishment was defeated. Why? The first reason was that the *Annales* approach allowed history to occupy a strategic academic position as the leader of the social sciences which the approach of the *Sorbonnistes* denied it. Their great interest in human geography, for which above all others Braudel was responsible, and their respect for statistical methods made the *Annalistes* respectable social scientists while the weakness of economics in France disposed of their most powerful rival.

The second reason was the arrival of a new wave of younger historians who were interested in social and economic history. The same phenomenon was apparent in England at about the same time. Yet this does not explain why the *Annaliste* tradition triumphed over others which placed equal emphasis on social and economic history.

Part of the answer is that as a result of the efforts of Febvre and later Braudel the *Annalistes* had a secure and powerful institutional base in the sixth section which was far superior to that of their rivals in the still unreformed universities. But perhaps most crucial was their ideological neutrality. Their old rivals, the *Sorbonnistes*, and new ones like Labrousse who had been Blum's *chef du cabinet*, were tainted with the polarized politics of the Third Republic. The *Annalistes* in contrast seemed more in tune with the technocratic world of the Fourth and Fifth Republics.

Yet the *Annalistes* have not used their hegemony in a capricious or exclusive way. Braudel himself, whose own political views have always been discreetly hidden, has encouraged young historians of left and right apparently without distinction. As an historical tradition *Annalisme* has become a broad church. The danger is not that it will ossify into a new stifling orthodoxy but that it may become too diffuse and lose its sharp identity.

Whatever happens there can be no doubt that Braudel's institutional achievements have entrenched history in a more influential position in academic life in France than in most other countries. He makes no apology for this intellectual hegemony of history. It is not like sociology the prisoner of the present, with a time scale far too short for an adequate perspective on change. Nor is it like anthropology a prisoner of changelessness. Instead it is about the vitality, the dynamism of man's development and so rightly the leader of the social sciences.

However, Fernand Braudel will be judged above all on his intellectual achievement. For he has given the *Annales* tradition not only an institutional structure but an intellectual one also. It is he who has refined the methodologies on which his own achievements and those of his successors have been built. Of course, Braudel's division of history into three levels, *structures*, *conjonctures*, and *événements* strikes some pragmatists as artificial and over-rigid. Braudel himself recognizes the limitations of any methodology.

"Breaking down the problem in order to understand it more fully, dividing it into three levels or stages, amounts to mutilating and manipulating a much more complex economic and social reality", he admits. "In truth we must grasp the whole."

It is on his own attempts to grasp this whole, first in *The Mediterranean*, then in *Capitalism and Material Life*, and now in a new venture, a three-volume history of France, that Fernand Braudel's reputation will ultimately rest. The skill of the historian resides as much in his own intellectual creativity and imagination as in his enthusiasm for more mechanistic research. In neither quality is Braudel wanting. One of his favourite authors is Rabelais. It may seem paradoxical but it is not untrue to regard this guardian of the *Annales* as the Rabelais of French historiography.

Time to stop and think

The setting up of the Business Education Council (BEC) at first looks very similar to the coordination of technician education by the setting up of the Technicians' Education Council. But there are problems in education for business which create extra difficulties for those planning education and training.

What are these difficulties and what steps are necessary to ensure the provision of adequate education for business today?

We have been lacking a critical overview of education for business. Those in the professional bodies directly engaged in the provision and training of chartered, certified, and otherwise qualified accountants and company secretaries have been engaged in extensive discussions with the Business Education Council in an attempt to relate their own professional training programmes to the requirements of general business education.

Other professional bodies have had even greater difficulty, partly because of uncertainty as to the scope of the activities of the Business Education Council. The relationship between business education and management education, and particularly the relationship between higher level courses of the BEC and the Diploma in Management Studies, has not been clearly defined and this difficulty has been increased by the fact that the responsibility for the diploma has recently moved to the Council for National Academic Awards.

The Royal Society of Arts and the London Chamber of Commerce (both of which operate examinations in business subjects) have commented in their reports on the difficulty of giving students a broad view of the world of business and a sense of relevance in their training.

A parallel problem exists for those engaged in the construction of courses, the preparation of course material, the teaching of existing business programmes, and particularly the formulation of new programmes designed for a variety of business contexts.

Not only is it important that a student, however vocational his course, should be given a broad view of what business in general is about; it is also clear that no course, however specialized, can be adequately constructed unless those who formulate its principles in the first place themselves have a general view of what business education as a whole ought to be concerned with in 1977.

But we have also been lacking a creative philosophy. It seems clear that such a philosophy must come from inside industry and commerce. Employers must be heard to say what it is they want in the basic education and continuous training of their staffs.

The British Association for the Advancement of Science has recently been looking at the employment prospects of engineers in relation to their training. The Department of Industry has also made a number of recent statements about the need to get highly qualified people interested in manufacturing industry, not only at management level but also in production. In a similar way there is a serious need for the current requirements of business to be spelled out from within business, as they were to a certain extent in a number of reports before we had a Business Education Council to implement proposals. But now requirements have changed and it is time that we looked again at our needs and asked the critical questions.

Foremost among such questions must be whether we primarily require suitable training between the ages of 16 and 19 (or 13 and 21) for those considering business as a career. That is to say, are we principally looking for a means of providing preemployment training on the basis of, say, economics, accountancy, and law, and if so in what shape and with what accompanying disciplines should such training be constructed?

Those daily engaged in the administration of educational institutions are well aware of changing patterns in employer attitudes to day release. Presumably the extent to which more senior staff can be released to short courses, for updating and mid-career development, or for specialized seminar courses of various kinds, will continue to depend on changing factors within individual situations.

But the question of day release for part-time courses at undergraduate level and below must be part of any serious consideration of a philosophy for business education.

It would however be a great pity if all that happened was that consideration was given to the balance between one form of business education and another.

That may amount to planning, but it scarcely discloses a business education philosophy, and it certainly does not disclose a creative one.

Yet an attractive overall design for business education cannot emerge until there is a creative instinct in our thinking about the processes involved in what we are doing.

Over a long acquaintance with business education and training, at first within business organizations and then in teaching, I have come to the conclusion that we are moving continuously away from simplicity and attractiveness in our business studies courses.

It is surely time that we reviewed the educational objectives which the BEC, the professional organizations, those concerned with the training of managers and those with an interest in disciplines related to business might all share.

Then again, if we have been lacking a critical overview and a creative philosophy, it will be felt by many that we also lack a credible design. We live in an age of the modular degree, the tree of knowledge cut up to build a climbing frame. Many courses, other than degrees, including those proposed by the BEC, are modular in form.

Now one of the consequences of a dismemberment of the tree of knowledge is that one soon forgets which part of it grew out of which other part, how and why. In other words, subjects are taken for their usefulness and given the appropriate treatment. In their examination policy professional bodies have sometimes tried very hard to avoid this kind of consequence.

The complexity of the modern world make a master design for business education difficult to achieve. Reference has already been made to the planning of courses within the requirements of particular fields of employment or for subject specialisation.

The grouping achieved by setting up the various studies boards of the BEC represents a rough grouping of study areas by subject or vocational focus. The roughness of this analysis of the requirements of business may be a cause for concern as the administrative load of putting even this small number of boards into operation becomes effective.

It is essential that the education committee of the BEC should concern itself with a deep consideration of questions of policy. A quick look at the membership of the council itself and of the education committee suggests that neither of these bodies yet contains as large a proportion of members from the practising side of industry and commerce as may be desirable.

It is of the greatest importance that those who participate in the discussion of the future of business education should come in great measure from the practitioners of business.

We have, then, been lacking a critical overview of education for business, a creative philosophy to back up and precede the drafting of schemes for such education, and a credible design for our overall programme in this area. How can this be put right?

In the first place, it is desirable that the regional management centres should look seriously at the training of teachers for business studies and related sectors. Totally inadequate provision has been made in the past for training staff in educational methods geared to teaching business subjects.

Second, the role of the professional bodies in the training of specialists, and in particular the problem of providing such people with a general education in business, should be examined much more comprehensively than it has so far been.

Third, the intended role of the BEC general certificate and diploma and the national certificate and diploma should be fully considered by all those involved in the employment of appropriate staff, and the relationship between the BEC higher certificate and diploma awards and degrees (whether in business studies, accountancy, distributive trades, public administration or other areas) should again be the subject of discussion between educationalists and those employing staff so qualified.

Fourth, it is to be hoped that much more will be heard from employers about what they require from the basic education of their staff and from short courses—notably what they sense to be the proper relationship between in-service courses provided by the employer and short courses provided outside the employment context.

The danger that we shall seek to do too much too soon is a real threat. Now is the time for us to stop and think about business education as a whole. Now is the time for more careful investigation of the relationships between business education and industry.

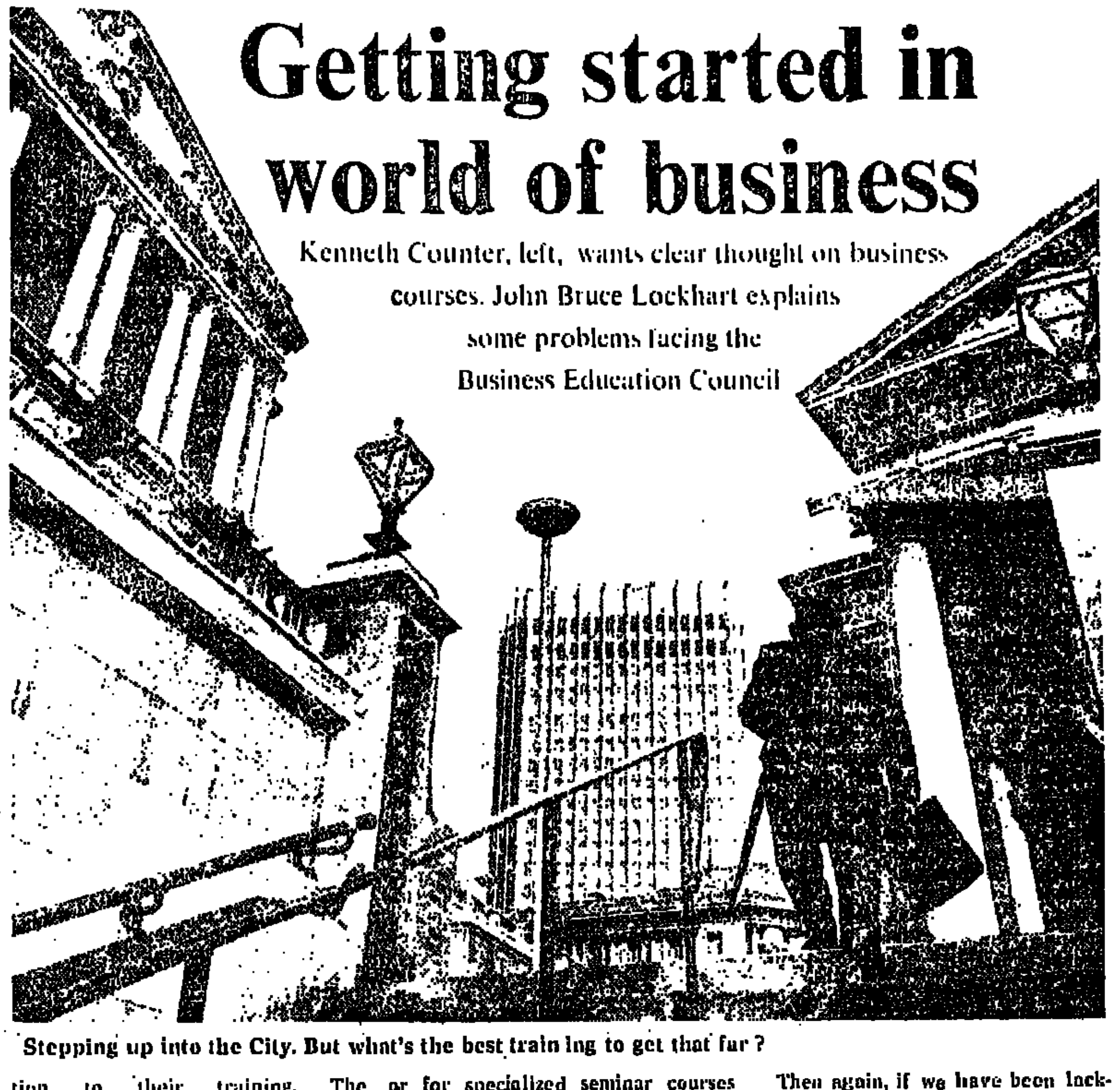
It is regrettable that naive assumptions have been made about the attitudes adopted by academics to industry and by industrialists to the academic world. There is, in particular, no reason to suppose that those employing the products of business courses are in some way incapable of expressing their requirements both precisely and clearly.

Only by a discussion at national level of the needs of business in terms of the education of its work force can that education be provided to the mutual prosperity of business itself and the educational institutions which serve it.

The author is assistant director of the Polytechnic of the South Bank. The views expressed are his personal views.

Getting started in world of business

Kenneth Counter, left, wants clear thought on business courses. John Bruce Lockhart explains some problems facing the Business Education Council



Stepping up into the City. But what's the best training to get that far?

How to match courses and careers

Two aspects of the problems faced by the Business Education Council have a wider relevance. The first is the difficulty of finding a sensible definition of business education. The second is the practical problems that arise when employers and teachers sit round a table to consider what constitutes a vocational education for business.

There is, of course, no right or wrong answer to the question "What is business education"? Nevertheless, the first task of a Business Education Council must be to make up its mind about a workable definition. We started by obtaining as many views as we could. During this period we sometimes felt that for teachers business education was what they were capable of teaching; while employers did not really believe in business education very much, and when they did their views were of a startling variety.

We decided that for BEC business education should cater for four ranges of careers: the financial sector (banking, accountancy, insurance, etc); the manufacturing world; the distributive trades; and public administration. BEC has created four boards of studies which are now designing vocational courses relevant to these careers.

But if you leave it at that you simply provide four tidy packages with no common theme, no point of unity, and business education simply becomes a vocational package deal based on four ranges of careers.

This was perhaps the most difficult problem BEC had to face, and having considered several solutions we settled on a very simple proposition. BEC courses have to cater for careers as different as an accountant, a floor manager in a departmental store, an assistant sales manager in a manufacturing industry, and an assistant in a social services department in a local authority.

Across the whole spectrum of the careers there are four ranges of careers basic skills or certain common basic skills or areas of knowledge. These are: money; people; numbers and analytical systems; and the speaking and writing of clear and simple English.

These four central themes are to be integrated into every BEC module at the national and higher level. They are not to be taught as separate subjects, but they are to be an interelated part of all courses leading to BEC awards. If the student does not show a reasonable mastery and understanding of these four central themes then he will not obtain his BEC award. By insisting on this we believe we have given a clear meaning and a unity to business education.

It will mean a major challenge to teachers, as it implies in many cases a change of approach and even a change in teaching techniques. It is all very well to make fine speeches about "the importance of adaptability to change in a changing environment". It is a different matter when change starts coming into one's own lovingly cared-for backyard.

We have had many talks with teachers and educationalists on this problem. Most believe that the concept is intellectually and educationally sound, but that the execution will not be easy and that teaching the speaking and writing of clear English will be the most difficult of all.

The success or failure of BEC depends on the goodwill and cooperation of many groups—employers, students, institutions, unions, parents, career masters, educationalists and others. Fundamentally, however, it depends on the ability of employers and teachers to work together. There is no lack of goodwill on either side: but there are three hurdles to be overcome.

The first hurdle is that the further education system in England is highly complex, and the great majority of employers do not understand it. The teacher whose life's work lies within the system finds it hard to accept that anyone cannot understand it.

The second hurdle is a matter of jargon. All trades have their own terminology and shorthand, and the educational profession is no exception. A head of a business department in Manchester, a member of the DES, a lecturer in computer studies in Cardiff, can all understand each other. But to most employers their conversation might be spoken in ancient Greek.

The third hurdle is that to a teacher BEC committee work is near the heart of his work. If an employer has "trouble at the works" or a cash flow crisis, his work on a BEC committee, quite understandly, becomes very much a second priority.

These three hurdles are real. We have appointed as chairmen of the four boards of studies distinguished employers, and the members of the boards are people of sound reputation from business, teaching and the unions. The basic need is for the employers to have a substantial say in stating their requirements in these vocational courses. In the past, for various reasons, they have not had enough say, and have consequently not felt truly involved.

But the major responsibility for surmounting these three hurdles rests with the teachers. It is they who will have to accept and sympathize with the employers' initial lack of understanding of the further education system, and give a helping hand.

Our experience within BEC's own boards indicates that these problems are beginning to be solved. It remains to be seen if the goodwill and understanding can be extended on a national basis.

The author is chairman of the Business Education Council.

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Comprehensive university or radical alternative?

The left in Britain has never been able to make up its mind about higher education. Should it seek to create a radical alternative to the present admittedly elitist forms of higher education? Or should it concentrate instead on democratic reform of the present structures? In other words, should the left seek an external and revolutionary or an internal and evolutionary solution to their central dilemma: how to make higher education, and in particular the universities, more accessible to the people as a whole and less the purveyor of values that inevitably reflect the preferences of those who at present hold political, economic, and even intellectual power.

The first group seems to start from the belief that the universities are not susceptible to democratic reform and so must be left to die out like the dinosaurs—or, to take a parallel closer to home, to be walled up in some ghetto with the independent schools. In their place a new crop of "peoples' universities" should be sown mainly from the seed of the more popular traditions embodied in further education.

The second group (of which Professor Robin Pedley who last week published a new book *Towards the Comprehensive University* is a representative figure) believes that the comprehensive revolution which has been so successfully and beneficially applied to secondary education should be carried through to higher and further education. They seem to see universities as the grammar schools of higher education, and the polytechnics and other colleges in the public sector as the secondary moderns.

[illegible] is that both are crude stereotypes wrenched from the context of school education and they cannot be applied to the very different world of higher and further education without a reckless disregard for the facts. There are several powerful objections to the "radical alternative" model. First, universities are public institutions in practice whatever their residual legal status, as public both in their funding and their accountability as institutions in the unfortunately named "public sector" of higher education.

Second, they will remain the largest single sector of higher education for many years to come (310,000 students in 1981-82 compared to 250,000 in the public sector) so their existence can hardly be ignored however malignant their influence is believed to be. Third, the public sector institutions, on which presumably any rival system would have to be based, are only more democratic than the universities in the very limited sense that they are—involuntarily—a little less meritocratic. There is no evidence that the values which inform the polytechnics and other colleges are in any substantial way different.

The flaws in Professor Pedley's "comprehensive" model are just as great. It too rests on the assumption that there is a sharp dichotomy between the "elitist" values of the universities and the "popular" values of the public sector. Nor is there much evidence that in the last seven years since the effective creation of the polytechnics the public sector has been less generously provided for than the universities. In any case the complaint that polytechnics are the poor relations of the universities seems to carry with it the assumption that polytechnics too have a "right" to more academic autonomy, more generous research facilities, better qualified students—hardly the objectives of a left-wing policy for higher education.

The danger with the first stereotype is that it may persuade the more gullible on the left to support the polytechnics and to attack the universities for quite the wrong reasons. There are good reasons for maintaining some degree of distinction between polytechnic-style and university-style higher education but it is not a distinction that should be pressed too far. Certainly it is too weak to bear the weight of an elaborate and misconceived ideology.

The danger with the second is that by mimicking the comprehensive reorganization of secondary schools far too much attention will be paid to ways of levelling out the opportunities enjoyed by the privileged 15 per cent who receive higher education at present and far too little to the needs of the remaining 85 per cent. The important distinction is not between universities and the public sector, or even between the core of universities and polytechnics and the growing fringe of institutes and colleges of higher education, but between the minority of haves and the majority of have-nots.

Yet there is a germ of valuable truth in both stereotypes. From the radical alternative model comes the important idea that universities should not have a monopoly of power and prestige within higher education. Within the much broader higher education system of the future universities (and perhaps some polytechnics) will play a more specialized role, rather as the major research universities do in the United States, the apex of the pyramid still perhaps but no longer the exclusive focus of achievement.

From the comprehensive model comes the equally valuable idea that universities must not be allowed to shut their eyes to changes in other parts of further and higher education, or indeed, to wider social changes. For example, they must accept greater responsibility for the education of adults as well as school leavers. (They will probably have no choice. When the slump in the birthrate begins to affect higher education in the middle 1980s they will be forced to adopt a more liberal outlook on the recruitment and selection of students). Also, although higher education is likely to become increasingly diverse, it is important that it should retain a philosophical unity. As Lord Robbins has said of the various aims of higher education, there is room for a speck of all of them in each and every institution. The further education college must never forget the demands of scholarship; nor must the university forget its responsibility to the non-scholastic community.

So a middle way for the left can perhaps be found. In it the emphasis would be placed on comprehensive provision rather than comprehensive institutions (although the idea of a comprehensive university in a particular city should not be ruled out if it seems a sensible solution on pragmatic grounds). Two essential principles must be established. First, there must be routes into higher education available to all who wish to enter, whether they have low academic qualifications and wish to study full-time, or high academic qualifications, and wish to study part-time. Second, transferability of credit must be more widely accepted. Here the tradition of a system open from bottom to top which has always been a feature of further education is a valuable precedent.

The best structure to implement these two principles of open access and easy transferability might be to have two layers, a layer of locally-based higher/further education colleges on the pattern of American community colleges (not forgetting that community colleges were also envisaged in the 1944 Education Act), and a layer of major institutions of higher education based on the existing universities and polytechnics. Some would argue that room should also be found for an "elite" layer of a small number of more specialized institutions (like the French *grandes écoles*?). In this way the demands of academic integrity and social responsibility could be reconciled.

LETTERS TO THE EDITOR

Academic salaries

Sir,—In the article by Judith Judd (*THES*, November 25) it is reported that university lecturers' salaries are on average £250 lower than those of lecturers in polytechnics. The scales you quoted were (minimum and maximum—ignoring bars): University: senior lecturer, £6,443 to £7,951; lecturer, £3,333 to £6,655. Polytechnics: PL, £6,432 to £8,078; LII/S L, £3,744 to £6,909.

In order to work out the average pay of the two groups it is necessary to take account of the higher proportion of senior teaching staff in universities (26 per cent compared with 15 per cent in polytechnics on your data) and, assuming that the average pay for the group is the mid-point of the range, the "average" university lecturers' pay would be £5,557 and that of a polytechnic lecturer £5,611—little difference.

The effect of "bunching" at the top of the respective scales is most likely to remove the whole of the differential—given that the LII/SL scale is split into two there is probably a greater bunching on this scale at a midway point than there is on the university lecturers' scale (which, it is recognized, is badly bunched at the top end). The effects would be even more dramatic if professors and heads of departments were included.

What *is* more likely is that age-for-age pay obtainable in polytechnics is higher than that in universities—but for this university lecturers reluctant to accept higher teaching loads elsewhere and content to operate in a system where "lecturer" continues to be regarded as the career grade, can only have themselves to blame.

Yours faithfully,
M. H. ATKINS,
C. S. GODDARD,
Department of Business and Professional Studies,
Trent Polytechnic,
Nottingham.

Sir,—The news that the Government intends to hammer university teachers yet again has a by now familiar credibility: university teachers have been specially treated since, in effect, April 1974, the date to which the Houghton settlement was backdated: they have been specially disadvantaged; and they have had enough of such treatment.

As Laurie Sapper has pointed out, there is nothing in the Government's present pay policy that prevents the rectification of the pay anomaly of university teachers. The fact that what started out as a 10 per cent *average* is being treated as a 10 per cent *norm* is a measure of that inability to govern, that is, to make choices, which has so discredited recent Governments.

One simple way to rectify the pay anomaly and keep within the 10 per cent average has already been suggested in print: it is to give university teachers 26 per cent from May 15, 1978, making a figure of 10 per cent over the year. I would like to suggest an alternative, which has a more direct relevance to the anomaly itself.

Pool the 10 per cent due to the educational profession as a whole; make the 16 per cent deficit in university salaries a first charge on that fund (as there are relatively few university teachers, this will not represent a very large proportion); and then divide the rest among all teachers—it might work out at about 7 per cent. I am sure that our graduates in further education and in the schools will see the justice of such a proposal.

Yours sincerely,
BRIAN ROWLEY,
School of European Studies,
University of East Anglia.

Sir,—University lecturers are making a big point of the extent to which they have lost out on their pay to polytechnic lecturers since Houghton. I wonder therefore why polytechnics are not swamped with applicants from universities when it comes to job vacancies.

I think I know the answers but it would be nice to have from the universities something more than just partial statements about the realities of the matter.

Yours faithfully,
SILVAN JONES,
Green Lane,
Coventry.

Reopening Fircroft

Sir,—We write to support your call for the reopening of Fircroft College (*THES* November 25). As you rightly say, the lost opportunities of the past two years should not be allowed to continue. However, your question, on what terms, remains highly relevant.

For better or worse, the Cadbury trustees entirely rejected the recommendations of the Department of Education and Science Inquiry into the running of the College. Since Fircroft was, and remains a private institution, the trustees were within their legal rights to do that. Whether the Department of Education and Science is justified in providing further public funds on that basis is another question. This reservation cannot be dismissed simply on the basis of private discussions with TUC officials. At the least, an adequate means of ensuring that the college is publicly accountable for its grant expenditure is essential.

The continuing dispute about the nature of the education to be provided will have to be resolved before the college is in a position to readmit students. Here it is pertinent to ask why the TUC insist on majority control while at the same time disclaiming any intention to determine what the college does. Both liberal studies and labour education are valid, but they are not the same thing, and an enforced mixture of the two would only sow the seeds of fresh disputes.

If, as seems likely, labour and trade union studies are to prevail, the propriety of subsidizing the exercise from public funds becomes an even more important issue. In this context, it has been too quickly forgotten that the genesis of the 1975 dispute lay in an argument about academic freedom. The Cadbury trustees, to whom any new governing body will necessarily be responsible, could demonstrate their good faith on this point by reinstating the redundant teaching staff. That staff remains adamant that such freedom is necessary if the college is to restore its credibility as a genuinely educational, and not a propaganda, enterprise.

R. MILSOM,
Secretary,
Association of Scientific, Technical and Managerial Staffs,
Fircroft Group,
Birmingham.

Study explained

Sir,—A friend, a few years short of retirement, has recently applied for an Open University place. He was invited to a social evening, together with his wife. Other candidates were also encouraged to bring their wives, girlfriends, parents, whoever they lived with. There were clear and friendly explanations and discussion about the number of hours each week that were required for study and the kind of consideration or sacrifice that might be required in social and domestic terms from the applicants and their families.

I was told that some candidates carefully considered at this stage if they ought to withdraw their applications rather than drop out or fail later on, for reasons not directly connected with their ability.

Perhaps if similar trouble were taken with young people applying to universities and technical colleges we might have fewer dropouts and suicides among them.

Yours sincerely,
MARIETTA MARCUS,
Sunbury Avenue,
East Sheen,
London, SW14.

Research councils

Sir,—Owing to a typing or printing error, my article (*THES*, December 2) contains an obvious misstatement. Where I say that the research councils "only handle research directly related to governmental policy", I meant to say: "should only handle" such research.

Yours faithfully,
MAX BELOFF,
Principal,
University College,
Buckingham.

Modernism

Sir,—May I be permitted to comment on Michael Long's generous review of my book, *The Lessons of Modernism* (*THES*, December 2)? I may seem churlish to find fault with a review that was so full of praise, but since he went on to criticize the book for not doing something which it seems to me was precisely what it *was* doing, I should be grateful for the opportunity to put the record straight.

"When I think of modernism" writes Long, "I think, like Josipovici, of an art great in the knowledge of predicament; but I think too of an art which is great in comedy and whose greatness in comedy is intimately connected with its post-theological knowledge of the varieties of creature and creativity". He criticizes me for not seeing this and for giving central place to Eliot, Kafka and Mann and not to Stevens and Joyce.

"I doubt", he says of Mann's *Dr Faustus*", whether this particular study of the modernist artist merits the central position that Josipovici has given it . . ., and if I am right to want . . . to argue that the classic colours of modernism are more motley than Josipovici suggests, then Mann's book will even less offer itself as a definitive statement."

But what does one have to do in order to be understood? In the title essay of the collection I state categorically that for me the lessons of modernism are twofold, "silence" and "game"; and I go on to criticize Mann and the German cultural tradition from which he springs (and whose most eloquent recent spokesmen have been Erich Heller and George Steiner) for emphasizing the "silence" at the expense of the "game" aspect.

I too see Wallace Stevens—and say so—as having a central place in any true account of modernism, and though I do not devote much space to Joyce I do devote a good deal to Stravinsky. In one essay I explicitly use Stravinsky to make a point about what I see as the limitations of the view of culture expressed in *Dr Faustus*: "By making his narrator a parody of a latter-day Humanist [Mann] seems to be asking whether the crisis model of history and culture is not itself the product of a specific set of cultural assumptions; whether, in fact, it is correct to speak of culture and music as having come to the end of the road . . ., and whether one ought not instead to speak of it as having come to the end of *a* road: that broad road which leads from the Renaissance to the nineteenth century, and along which are to be found most of the works of art with which educated Europeans today are familiar." We will not find answers to these questions in Mann himself. Like Schoenberg, he is too much a part of European and German culture to do more than glimpse the possibility of alternative attitudes. But let us turn to another voice, one strangely free of the doubts and self-torment to which Mann and Schoenberg are prone".

After quoting what Stravinsky himself said about *Les Noces* (where he points out the similarities of his approach to that of Joyce in *Ulysses*), I say: "Like Picasso and Joyce [but unlike Mann and Schoenberg], Stravinsky, overthrowing the moribund conventions of his time, found himself in touch once more with ancient but still vital traditions of art."

In fact, the last third of my book, not mentioned at all by your reviewer, consists of essays on the music-theatre of Stravinsky, Britten, Maxwell Davies and Stockhausen, in all of whom I discern a welcome emphasis on the "game" aspect of modernism. The last essay, on Stockhausen's *Inori*, is specifically meant to refer back to the opening essay on Kafka and in a sense provides one answer to it.

Yours sincerely,
GABRIEL JOSIPOVICI,
Prince Edwards Road,
Lewes,
Sussex.

Robbins plus 20: which way for higher education?

A shortened version of the Foundation Oration given by Mrs Williams, the Secretary of State for Education, at Birkbeck College on November 30

Since Robbins reported in 1963 the higher education system in Great Britain has more than doubled in size. Broadly speaking, its recurrent cost this year is running at something over £1 billion. Demand is still growing as Robbins foresaw: he suggested 560,000 places in 1980-81; that is the present planning figure for 1981-82. A coincidence perhaps; much of what has happened in the past 14 years Robbins could not have been expected to foresee.

What is remarkable is the way the Robbins principles have stood the test of time, namely the axiom "that courses of higher education should be available for all those who are qualified by ability and attainment to pursue them and who wish to do so". My aim today is to review some major features of higher education since Robbins and to take a speculative look forward over the next 10 years.

The main stream of demand comes from young home entrants. Steady growth of student numbers in the past two decades conceals some remarkable trends. First, demography: the number of 18-year-olds in Great Britain reached a peak of 900,000 in 1965. Over the next four years it fell by nearly 20 per cent and then started to grow again, more slowly. It will not pass 900,000 again until the turn of this decade.

Yet, despite that recession in numbers, home students rose steadily. Growing ability and willingness more than made up for the effects of birth rate. I shall mention two main indicators in this talk which are used in predicting the demand for HE from young home entrants: "age participation rate", and "willingness rate". Age participation rate is the ratio between the number of initial home entrants under 21 and the 18 year old age group as a whole. Willingness rate is the ratio between initial home entrants under 21 and the number of qualified leavers.

In the 10 years following Robbins the participation rate doubled, reaching 14 per cent in 1973. Two factors were at work. The "willingness rate", already over 90 per cent in the mid 1960s, continued to rise for some years and the number of qualified leavers from schools and colleges roughly doubled in the 10 years after Robbins, rapidly outstripping his projections. For 1967-68 his forecast was 69,000: there were in fact 95,000.

The policy of providing places to meet demand meant that Robbins' estimates were steadily exceeded over this period. The half-million mark for student numbers was reached in the mid-1970s, some four or five years ahead of what had been foreseen. To say this is to imply no judgment; major educational developments and policy decisions have profoundly changed the scene since the early 1960s. Compared with 23 universities then, there are now 45. Initial teacher training was rapidly expanded, nearly 50,000 places in 1962-63, 115,000 in 1971-72. Successive Governments, through the 1966 and 1972 White Papers, have taken a rather different view from Robbins both on the organization of institutions in the public sector and their rate of expansion. Thirty polytechnics were established to form the spearhead for the development of the non-university sector. In the 10 years following Robbins the fastest growth, albeit from a relatively small base, was in the polytechnics and other maintained colleges offering advanced further education; the 1972 White Paper saw these institutions as leading future growth.

After rising sharply through the 1960s, the participation rate has since tended to settle out around 13 to 14 per cent, declining a little from 1972 to 1975 and showing a slight upturn last year. The willingness rate also fell a little in this period. There are somewhat similar features to be seen in the flow of pupils with GCE qualifications. The proportions of boys and girls obtaining five or more O levels, after rising in the 1960s, appears to have levelled out at around 22 to 23 per cent in the first half of the 1970s; and the proportion getting two or more "A" levels has risen only slowly, from 13.3 per cent in 1969-70 to 14.6 per cent in 1975-76.

On parents' occupations data are sparse. For UK universities UCCA figures show: that students are accepted broadly in the proportions in which they apply; that nearly half of the applicants come from the two parental occupational groups which cover professional people, administrators and managers; the proportion of these groups in the population at large was 25 per cent in 1971; that candidates from these groups slightly but steadily gained ground from 1970 (44 per cent of accepted candidates) to 1975 (51 per cent); that the other occupational groups are under-represented. In 1971, candidates whose parents came from skilled (manual), partly skilled, and unskilled occupations accounted for under a third of the applicants, compared with a proportion of nearly two-thirds in the population at large. Thus the participation rates differ markedly: the professional and managerial occupation groups about 13 per cent in 1974, others together about 5 per cent.

This evidence, taken with that on the levelling out of A level attainments and the high willingness rates, would seem to suggest on the face of it that there is a considerable further proportion of young people capable of entering higher education; but that quite deeply-rooted factors are influencing their aspirations and decisions in other directions. Differences are visible at the age of 16. In a sample survey in 1975, 60 per cent of 16 year-old school children with fathers in non-manual occupations wished to stay on in full-time education, twice the rate found for pupils with fathers in manual occupations.

This preoccupation with features of *demand* for higher education follows broadly in the course set by Robbins, who found the approach of forecasting *manpower* needs impracticable as a basis for planning higher education places. Many would accept that this is the case today, certainly if one is thinking of quantitative national targets. This is not to reject evidence and perceptions of manpower needs as factors that should rightly influence our decisions; indeed in the last 10 years in the fields of medicine and teaching they have been dominant influences in provision.

A good many steps can be taken to help reduce the problems created by uncertainty about manpower needs: two might be mentioned. First, the strategy of delayed specialization; of loosening the link between specialization during higher education and specificity of occupation. Second, as a corollary, widening the range of jobs into which graduates enter, beyond the traditional categories.

The past few years have seen a good deal of concern and discussion about the employment prospects of increasing numbers of new graduates. This is not new. Even before the Second World War there was concern about graduate employment opportunities. Without being complacent one may say that broadly speaking the signs are that, as the supply of graduates has grown, the labour market has been able to absorb the increase. In the past five years, for example, it has been estimated that some 140,000 graduates, over and above the number required to fill jobs of the type held by highly qualified people in 1971, have been absorbed into the labour market. These represent about half the increase in new graduates between 1971 and 1976. This has meant changes in the attitudes of both employers and graduates.

Over the next decade it seems likely that graduates will continue to spread out into jobs for which highly qualified manpower has previously not been available. Of these, more will be women than men, and more will have degrees in arts and social studies than in science. Such graduates will need to appreciate the breadth of employment opportunities they should consider.

The picture today then is one of massive growth in response to buoyant demand; women improving their place; graduates moving into new fields of employment. But, latterly, signs of "willing and qualified" demand dropping. Add to this the possible effects of the 13-year-old fall in annual number of births which began in 1964 and the situation prompts thorough review and discussion. The population of 18-year-olds in Great Britain will rise by a further 14 per cent to 1982 but from that peak it will then drop, at an increasing rate, at least until 1994. This much is certain; the children are already born. Over a reasonably wide range of assumptions about participation rates, there is the very real possibility that while demographic changes will push up demand for higher education from the traditional stream of the young home entrant for the next five or six years and may keep it up for much of the 1980s, the 1990s will see a sharp decline in demand from this traditional source.

The years immediately ahead present problems, but not too acute. The government has recently reaffirmed a planning figure of 560,000 for 1981-82, implying about 39 per cent growth in England and Wales in advanced further education other than teacher training—mainly in the polytechnics — and 14 per cent in universities. Thus the public sector has a major task of expansion and diversification in the wake of the reduction in teacher training. Resources are being provided on the assumption that those who are suitably qualified and might otherwise have sought a place on a teacher training course will now seek an alternative course in higher education. Analysis of 1976 enrolments confirms that there has been no fall back in the number of girls entering higher education but the position will be carefully checked.

Inevitably resources — buildings and people as well as money—have influenced the planning dispositions in a major way. As the public sector seeks to redeploy resources inherited from teacher training courses, so the universities continue to have unfilled science places—perhaps approaching 20,000. It will be no easy task to attract qualified young students into these courses while maintaining proper standards.

The prospects of a marked decline in traditional sources of demand for higher education beginning in the 1990s prompts questions about other sources of demand, and about the management of our resources. The concept of continuing or recurrent education is gaining ground. Increasingly we realize that education and training cannot be met wholly in school and immediate post-school provision. Mature adults need to be able to return to education and training throughout life for various reasons (women picking up careers again after raising their families, mature students changing careers because of redundancy or shifts in industrial employment patterns, need to update technical and professional competence). Post-school education and training now seen as a continuum permitting many combinations of mode of attendance, subject areas, levels of study according to students' needs and motivation. What have hitherto been administratively convenient bundles of provision no longer have rigid boundaries. We need to think in a student-centred rather than an institution-centred way.

At present we have no strategy or articulated policy of recurrent education. But we accepted the principle at the European Ministers of Education Conference at Stockholm in 1975, with the proviso that it should be developed by building on existing foundations. Those foundations already exist in this country in our provision for mature students—as exemplified by Birkbeck itself, the Open University, long-term adult residential colleges, TOPS and other training schemes, and very diverse adult education systems.

Perhaps these elements need to be brought together into a more coherent relationship. Hopefully the newly appointed Advisory Council for Adult and Continuing Education, under the chairmanship of Richard Hoggart will play a significant part in helping to develop such a coherent approach. But it will not happen overnight; it will be a gradual and evolutionary process with progress possibly most evident when general concept is translated into action in specific areas of provision.

The Russell Report on adult education emphasized the need to make it easier for students to transfer between courses and institutions. Important initiatives have been taken by several educational institutions in this field, especially by the Open Universty and the Council for National Academic Awards. My Department is cooperating closely with many interested organizations considering the feasibility of setting up a service for recording and making available information on credits which have been given across the whole range of academic and professional institutions in the United Kingdom.

This problem has, I know, been tackled successfully in other countries such as Germany, Australia, Canada and the United States. It is interesting to note that these countries all have a federal system which has, perhaps, provided the stimulus to facilitate transferring credit between the States (or Lander). These arrangements, particularly in the United States, contribute substantially to the flexibility of their higher education systems. It is sometimes suggested that standards inevitably suffer as transferability is facilitated. I do not accept that this is inevitable; with sensible monitoring there is no reason why this should happen. Perhaps in our system, which though rich in diversity is still unitary in essence, it will be easier for us to develop a system without risk to our high standards.

Access to degree courses for mature students, full-time or part-time, remains of essential importance. But should we not also consider equally legitimate claims of other mature students for whom the cost, in social and family terms, of degree study is disproportionate to their needs? For instance, OU ordinary degree course will require 12-15 hours of study each week over six educational years. For those who do not intend to change or enhance their careers directly through acquiring a degree, but for whom only degree-level work is seen as higher education, and who wish to submit themselves to the rigours of such study, might not ready access to, and academic acceptance of, smaller portions of equally rich higher education serve many of the same needs? Equally, should it not be possible for such instalments of degree-level study to be taken at intervals as part of a structured total course, to enable those for whom the social cost of a once-for-all approach to a degree-level course is too high to achieve the desired end over a longer period? If pressure for increasing access to part-time HE is to grow as it ought, must it necessarily be for access to exacty the same amount and kind of HE as hitherto?

Robbins recommended that detailed planning should be made for a period extending 10 years ahead; and that there should be estimates covering the decade beyond. A look at the 1990s, on the knowledge we have today, suggests that there is a risk of provision exceeding demand, and the possibility of having to reduce staff and plant resources. It is much too far off to be sure. Even with relatively firm demographic information, planning higher education is notoriously difficult. One primary purpose of making projections into the future and producing planning figures is to inform the decisions that have to be taken now and in the immediate future. One is bound to ask: when, and in what way, should the longer-term possibility of contraction inform what central government, authorities and the institutions themselves decide about their growth and development?

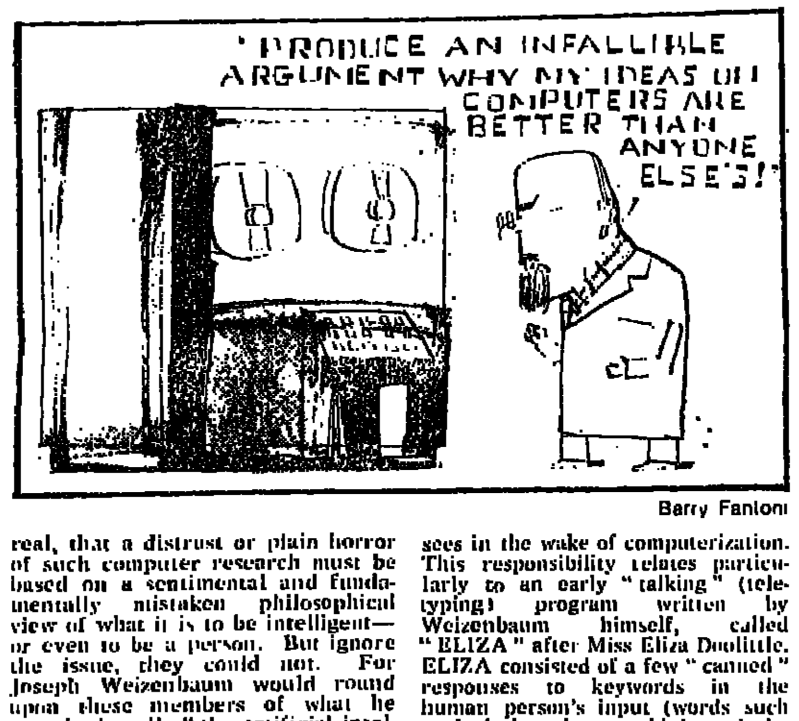
These matters need wide discussion. Almost inescapably we shall be pressed to reappraise the principle of meeting free demand in full, especially if new sources do not materialize. Whether they do or not the relative roles of the two sectors of the binary system may become increasingly distinct and differentiated. Robbins' objectives essential to any properly balanced system of higher education, were instructions in skills suitable to play a part in the general division of labour, teaching that promotes the general powers of the mind, the advancement of learning, and the transmission of a common culture and common standards of citizenship. These continue to be valid, although the emphasis may change in national thinking and will certainly vary from institution to institution. But as Robbins contended: "Ideally, there is room for at least a speck of each in all. The system as a whole must be judged deficient unless it provides adequately for all of them."

We are entering an unprecedented period in education when the combined effects of demography, tight constraints on public expenditure, an urgent and growing sense that education should be seen to be making a more palpable contribution to meeting the needs of employment especially in industry, and a measure of reaction from the idea that education is unquestionably a good in itself, will require the education service to be clear and articulate in accounting for the claim it makes on the nation's resources. Difficult and demanding though this may be it is a challenge that we do right to accept.

The author is Labour MP for Hertford and Stevenage and Secretary of State for Education and Science.

The artificial intelligentsia

The Thinking Computer: Mind Inside Matter
by Bertram Raphael
W. H. Freeman, £9.80 and £4.80
ISBN 0 7167 0722 5 and 0723 3
Machine Intelligence 8: Machine Representations of Knowledge
edited by E. W. Elcock and Donald Michie
Wiley, £24.00
ISBN 0 85312 058 7
The World Computer Chess Championship (Stockholm 1974)
by J. E. Hayes and D. N. L. Levy
Edinburgh University Press, £3.75
ISBN 0 85224 285 9
Computer Power and Human Reason: From Judgment to Calculation
by Joseph Weizenbaum
W. H. Freeman, £7.50 and £4.40
ISBN 0 7167 0464 1 and 0463 3


"PRODUCE AN INFALLIBLE ARGUMENT WHY MY IDEAS ON COMPUTERS ARE BETTER THAN ANYONE ELSE'S!"
Barry Fantoni

Were the authors of these four books to be marooned on a desert island, their rescuers would more likely find them engaged in heated and bitter wrangling than in urbane intellectual discussion or titillating professional gossip. The focus of their dissension would be no trivial topic, such as the eight gramophone records best suited to their island predicament, but would concern the basic aims and inner nature of humanity. Their shared professional expertise would enable only brief respite from polemics and discord, for the central point of contention is precisely the relevance of their professional interests to matters such as these. In brief, they would be arguing about the philosophical interpretation and practical application of research in artificial intelligence, or "thinking" machines.

Bertram Raphael's book, to be sure, contains not only the disarming promise that "I have no intention of ever kissing a computer, or of programming one computer to caress another," but also the unequivocally dismissive claim that "I am happy to leave the subject of computer emotions to philosophers and fantasy writers." In his introductory account of artificial intelligence, he emphasizes its potential usefulness to mankind as computers become increasingly able to talk (or teletype) sensibly, to understand our natural language input, to see and hear, and to move around and manipulate the world so as to be able to solve problems "in practice" as well as in thought alone. (Raphael's chapter on robots is the best available introductory account of robotics research).

Similarly, the *Machine Intelligence 8* volume—a useful collection of essays combining a "tutorial" function with discussion of advanced research in a wide range of topics within artificial intelligence—on the whole avoids explicit mention of the ticklish issues of human relevance. The nearest we get to such issues is the coy admission on the part of I. J. Good that "The value of a machine with human intelligence, since it would quickly lead to an ultra-intelligent machine, is obviously worth as much, in absolute value, as the gross international product, a few trillion dollars, *though it may be negative*."

Even Jean Hayes and David Levy, careful though they are to counter the assumption of many members of the general public that a chess program already exists capable of beating Bobby Fischer, cite the optimistic forecasts of various chess programmers that their systems will be able within the next 20 years to play the game at International Master level, and quote with tacit approval the opinion that "the pioneering work carried on by these dedicated few individuals and teams [involved in the first international computer chess tournament] is bound to lead to a better understanding of how human intelligence works and how man can better harness the computer for his own and society's benefit". Committed as one may be to this side of the coin, even such a very brief discussion might be expected to remark that there is perhaps another side also.

Careful though all these authors are to concentrate on the positive social and intellectual aspects of artificial intelligence, on the desert island they would not be able to eschew consideration of the negative aspects. They might, of course, conclude that the potential disadvantages are more apparent than real, that a distrust or plain horror of such computer research must be based on a sentimental and fundamentally mistaken philosophical view of what it is to be intelligent—or even to be a person. But ignore the issue, they could not. For Joseph Weizenbaum would round upon these members of what he sneeringly calls "the artificial intelligentsia", challenging them to rethink the implications of their work.

Though he might spend some time on casting doubt on forecasts such as Good's—that a machine of intelligence equivalent to man's might be produced within this century, or at some later time in the future—Weizenbaum would not concentrate on undermining such forecasts. For him, the question is not so much what computers can or might be able to do, but rather what we ought to allow them to do.

His book on *Computer Power and Human Reason* is an impassioned attack on scientism in general and artificial intelligence in particular, one that accuses scientistic attitudes and machine-based models of the mind of denying us our full humanity and capacity for personal wisdom. According to Weizenbaum, machine models of the mind are of only very limited usefulness, and to introduce computers into areas of personal decision-making is to introduce a fundamentally alien form of intelligence that in principle can have no cognizance of genuine human interests. The danger of the computational metaphor, he says, is that—combined with the generally prevailing philosophical attitudes of scientism—it tends to exclude other valid approaches (such as the religious and aesthetic viewpoints) as being of no account.

One should not assume that Weizenbaum is a tender-minded humanist ignorant of all computational issues—and frightened of screwdrivers into the bargain. On the contrary, he is a respected computer scientist working alongside one of the most distinguished artificial intelligence groups in the world. Indeed, his book contains the clearest account I have come across of the basic computational notion of a "Turing machine", which is usually described in a forbiddingly abstract manner. Weizenbaum's account is more accessible while being no less rigorous. And for those who have any personal contact with programmers in general (and "AI" workers in particular), Weizenbaum provides a hilarious—and devastatingly accurate—description of the computer "hacker" or compulsive programmer, who can be prevented only with difficulty from bringing his cot (a significant choice of terminology) into the computer room, and who seemingly exists only through and for the computer. None the less, Weizenbaum's accounts of AI programs and how they work have to be taken with a pinch of salt—or, better, supplemented by the accounts given in Raphael's book and *Machine Intelligence 8*. His most careful descriptions are of the least impressive programs, and his comments on the more immediately-impressive systems are usually sketchy and sometimes unfair.

One may be willing to forgive Weizenbaum's dismissive treatment of the more interesting programs, on grounds not merely of the availability of other, more sympathetic, accounts, but on the grounds also of his sense of personal responsibility for the "dehumanization" he sees in the wake of computerization. This responsibility relates particularly to an early "talking" (teletyping) program written by Weizenbaum himself, called "ELIZA" after Miss Eliza Doolittle. ELIZA consisted of a few "canned" responses to keywords in the human person's input (words such as *I, father, happy, think*, and the ? sign), which at first sight—but only at first sight—seems to be simulating the conversation of a certain type of (nondirective) psychotherapist. Weizenbaum remarks with horror that he once was asked by his secretary to leave the room while she was "conversing" with the program, interpreting this to mean that she was attributing personal qualities to this alien thing. As one who has conversed with ELIZA, I can well understand that one might not want one's boss—or even one's best friend—in the room if one were sincerely responding to the canned prompts put out by the machine.

ELIZA prompted some psychiatrists in the USA and UK to consider using programs to aid in the diagnosis (and, some even suggested, the therapy) of psychological disorders. This suggestion is castigated by Weizenbaum as "obscene". One might well argue that no program will ever in practice be written that is sufficiently sensitive to be of much use in therapeutic, or even diagnostic, contexts. But this is not Weizenbaum's main point. His claim is that the (scientistic) definitions of "usefulness" whereby such programs might be regarded as useful must be poles apart from the convivial human interests which we should be putting first in such personal-emotional contexts.

Weizenbaum's scepticism about the use of computers in emotional contexts is linked with a scepticism about the promised contributions of AI to psychological or intellectual issues in general. He devotes an entire chapter to criticizing "incomprehensible programs", programs built on an *ad hoc* basis which may or may not "work" but which contribute little or nothing to the theory of the domain in question. He excepts the programs MACSYMA and DENDRAL, which respectively embody (and have contributed to the development of) powerful theories of mathematics and organic chemistry.

His remarks here can be compared with items in the other three books. Raphael specifically says that "being able to solve a problem, even though no one may understand precisely how it works" is a more important aspect of a program than its being "explainable in terms of some deep underlying theory". Many AI workers would share Weizenbaum's preference for a theoretically perspicuous theory, particularly if they hoped to use the program to illuminate theoretical psychology or some other intellectual discipline.

Hayes and Levy distinguish between bad moves on the part of the chess program that are superficially "inexplicable" (although of course they could be explained if one took the trouble to follow up the workings of the program in the game concerned), and faults due to gaps in our theoretical knowledge about chess-playing—such as the way in which experienced players perceive certain configurations as "threats", and the way in which they plan an overall strategy rather than thinking only at the tactical level (as current programs tend to do). Better chess programs must wait upon better chess theory; but the belief of computer-chess enthusiasts is that their programs will aid in the articulation of such a theory, much as DENDRAL proved theoretically helpful to organic chemists.

Finally, Weizenbaum specifically compares DENDRAL's theory-based performance with the archaeologist's intuitive reconstruction of the life of a prehistoric village from the archaeological remains. There being no theory of the latter "intuitive" activity, he regards programming as an inappropriate mode in which to tackle it. By contrast, James Doran in *Machine Intelligence 8* discusses the problems involved in formulating a representation of the archaeologist's knowledge that will enable sensible archaeological inferences to be drawn from evidence about the position, orientation and contents of graves in burial sites. His program SOLCEM is capable of considering the bulk of the evidence in a (small) cemetery excavation record, and of generating an integrated overall interpretation. He admits the uselessness of the current program for *large* bodies of real cemetery data, but argues convincingly that attempting to improve the program would throw light on the nature and use of archaeological evidence and theory.

"Intuition" may be not so much the name of a special sort of knowledge or thinking, available only to people, as the label for whatever knowledge or thinking-powers we have which we do not understand. And what we do not understand today, we may understand better tomorrow. Raphael, Hayes, Levy, and the contributors to *Machine Intelligence 8* would all agree that artificial intelligence is likely to help us reach such understanding, insofar as it is possible. How far it is in fact possible is a question just as important for theoretical psychology in general as for artificial intelligence in particular. Presumably Weizenbaum would argue that no theoretically complete understanding of the human mind is even in principle possible—unless we include some mysterious "intuitive" understanding as an integral part of (non-computational) theoretical psychology. Philsophers such as Michael Polanyi have argued this case with respect to *all* scientific knowledge, grounding so-called "theoretical" knowledge firmly in the context of the craftsman's practical expertise and human intuition.

By "intuitive knowledge", however, Polanyi does not mean something intrinsically unformalizable (he mentions many examples of the formalization of tacit knowledge, which he regards as triumphs of human thought), but merely something which has not as yet been formalized. Polanyi claims that there would never come a time when *all* the tacit grounds of our thinking had been made explicit, so that no room for intuitive interpretation of theory remained. This is a highly plausible view, and one which Weizenbaum would doubtless endorse.

Weizenbaum may be faulted for too often substituting rhetoric for argument on these issues. But the rhetorical raising of an important issue is surely more intellectually responsible than studiously ignoring its existence. Moreover, the artificial intelligentsia are sometimes rhetorical too. In answer to John McCarthy's question, "What does a judge know that we cannot tell a computer?" Weizenbaum retorts: "The very asking of the question, 'What does a judge (or a psychiatrist) know that we cannot tell a computer?' is a monstrous obscenity.

"That it has to be put into print at all, even for the purposes of exposing its morbidity, is a sign of the madness of our times." Since the authors represented in the other three books under review would almost certainly be prepared to ask this question, and some would even agree with McCarthy that the answer is obviously "Nothing!", it seems clear that the sooner the rescuers reach our desert island, the better. For Weizenbaum, of course, the concern is not a facetious matter of imaginary rescues from fictitious islands, but the serious question of how to rescue our civilization from a fate equivalent, on all levels, to death.

Margaret Boden

Intersecting

Psychology and Language: an Introduction to Psycholinguistics
by Herbert H. Clark and Eve V. Clark
Harcourt Brace Jovanovich, £11.30 and £7.45
ISBN 0 15 572815 6 and 572816 4

Psycholinguistics is not a discipline but rather the intersection of several disciplines. This creates particular problems for the textbook writer. Should he try to capture the richness and complexity of language studies; or should he concentrate a narrow beam illuminating one part or just one axis. Both approaches have been tried; neither with very satisfactory results.

The Clarks are remarkably well qualified to go for the broad approach. One is a psychologist who has made distinguished contributions to linguistic information processing in adults; the other is equally distinguished in her own field of child language acquisition, and a linguist by training.

Compared to their main competitors, they have covered an enormous amount of material in an intelligent and generally non-doctrinaire manner. For this reason alone the book will be useful to teachers and students.

A textbook can serve three functions. It can provide a brief conspectus of an area, suitable as an introduction to orient students to the main findings and issues. The Clarks' book cannot fit this bill; it is too big and too loose-limbed.

A second function is to serve as the basis for a course. Here the need is greatest, and the task most difficult. The text must be comprehensive, it must be coherent, and it must not pretend to greater certainty than is warranted by the state of the art. On all these grounds, the Clarks fail.

In spite of taking over 600 pages, it fails to be comprehensive because it contains nothing on language disorders, nothing on reading (though a number of studies reported depended on visual presentation of linguistic stimuli) and nothing on the physiological and neurological bases of language. Other areas are, however, given fairly extensive treatment, and pertinent material from sources not traditionally associated with psycholinguistics is often included.

For example, ethnomethodological studies of conversational sequencing get a good run; and another important addition is Grice's work on conversational maxims and how the speaker/hearer deploys his knowledge of them to convey and understand meanings.

It is too much to expect a text to impose order where none exists, but we can expect a greater degree of coherence than is found here. Too much of the book consists of throwing together accounts of relevant studies; and not enough of showing how these studies fit together or, more usually, fail to fit together.

They start badly in chapter one on the "Nature of Language". Three conflicting approaches to language are thrown together—phrase structure grammar, speech act analysis and a thematic structure analysis—with no attempt to point out the conflict or to resolve it.

They continue badly in chapters two and three on how listeners comprehend sentences because they continue this tripartite approach without mention of the conflict and without resolution.

There is a third and more modest function for textbooks—as reference book and background reading. Here the Clarks really come into their own. They have succeeded in framing psychological questions in ways which will interest and provoke the student, notably by placing psychological processes in a framework of human needs and activities. Even the chapters on comprehension, which I criticize, are put against a background of why people talk and listen. This may seem obvious and sensible, but no other textbook does it. Similarly, in the excellent and lucid chapters on language acquisition, they begin by asking what children talk about—again both sensible and original. There are other fine chapters on the representation and utilization of meaning.

Brian Butterworth

Hater of despotism

Napoleon and the Restoration of the Bourbons
by T. B. Macaulay
edited by Joseph Hamburger
Longman, £5.50
ISBN 0 582 50827 4

The great A. N. L. Munby once picked on Macaulay's projected, and partly completed, history of France from 1814 to 1830 as one of those *introuvables* over which book-collectors despair. In this case they need despair no longer; what is left of it has now been found, among the papers of Dionysus Lardner for whose *Cabinet Cyclopaedia* Macaulay was to have written it, and here it is, filling half a slender and beautifully printed volume.

Macaulay visited France in September 1830 to study the July revolution at first hand. He was not quite 30, and had sat in the Commons, for the pocket borough of Calne, for less than a year. He had already laid the foundations of his fame as a writer by some brilliant articles in the *Edinburgh Review*, and intended another, "of extraordinary interest", on the recent troubles in France. He was somewhat brusquely elbowed out of the way by Brougham, whom he never forgave; and started this book instead of writing his article.

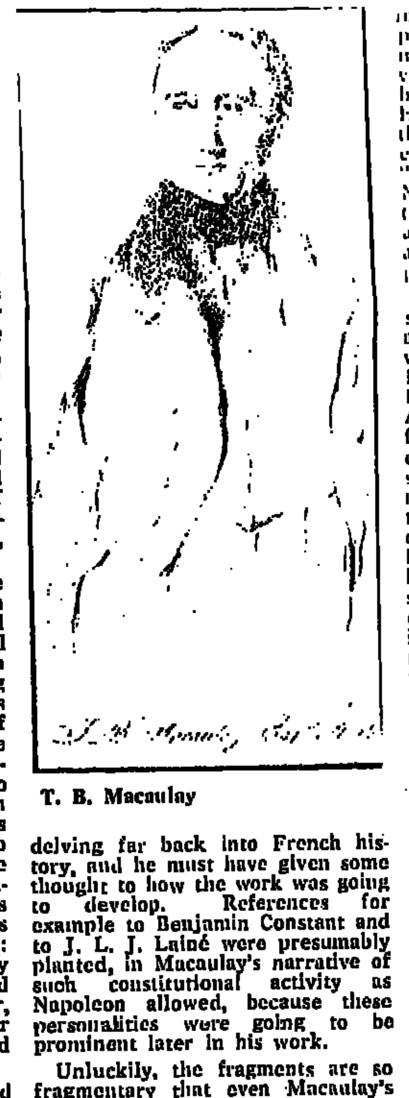
But the grand parliamentary crisis over the Reform Bill intervened. He became famous through his speeches for the Bill, had a hotly contested election to fight at Leeds, lost one of his beloved sisters and his mother, had a spell of financial stringency so sharp that he had to sell his Cambridge gold medals, got swept up into the Holland House set, and went out to India to make his fortune. In the end it was the history of England, not of France, that he wrote. That covered a similar period, of a restoration followed by a renewed and milder revolution; and that too was never finished.

In what is left of his history of France, he gives free rein to the anti-Bonapartist prejudices he had absorbed as a schoolboy, above all the belief that "between Napoleon and liberty there could never be more than a short and uneasy suspension of hostilities". He displays a passionate hatred of tyranny. In an age gone lax, his stunted followers can mock at his passion; yet much of what he says bears on our century's tyrannies as well as his. "The people were suffered to know only so much of passing events as it might please their master to tell them, or as might come to their knowledge by vague report." Again, "in an age in which opinion is all-powerful, despotism must have its foundation in falsehood".

If Napoleon's plans had succeeded, "an aristocracy of placemen, oppressing the people, and oppressed by each other", would have replaced the aristocracy of the *ancien regime*: what else happened in Germany in the late 1930s, or is happening in Russia today?

In ancient times, historians were expected to declaim their work in public. Macaulay was already well soaked in the classics, and had embarked on his career as an orator; there is a declamatory tang to most of his writing. Perhaps there needs to be, in the work of any historian who is going to be read outside the walls of a university or a school. He was fond also of historical analogies, of which later and more cautious historians are wary, and did not hesitate to look for them in the history of the Graeco-Roman world that was familiar to the educated public of his day. For instance, he illustrates the force of habit in politics thus: "At Rome, the chief who openly trampled on the constitution died by violence: his more cautious heir, who introduced despotism under the forms of the constitution, died of old age".

There are signs that he had planned his book on a generous scale. What is left of his opening passages includes some references


T. B. Macaulay

delving far back into French history, and he must have given some thought to how the work was going to develop. References for example to Benjamin Constant and to J. L. J. Lainé were presumably planted, in Macaulay's narrative of such constitutional activity as Napoleon allowed, because these personalities were going to be prominent later in his work.

Unluckily, the fragments are so fragmentary that even Macaulay's gift for being clear cannot always convey his sense. Time and again, the reader is started on an interesting line of argument, and then pulled up by a missing page. The manuscript has long since vanished; these partly dismembered proofs are all that was left. Even here, there are misprints that have survived a meticulous editor: the familiar "Russian" for "Prussian" (page 104), even the Norse god Odin disguised as Oder (page 55). Macaulay wrote without a single footnote; the editor needs a dozen pages of notes to two dozen pages of introduction.

Macaulay would never have passed the phrase, in a biographical appendix, that Marshal Ney "convinced Napoleon to abdicate" in 1814; but then, Macaulay wrote English, and the editor writes American, as is proper for a professor at Yale. Not the least interesting feature of the book is that it shows how far the two tongues have now diverged. Macaulay deals with the Waterloo campaign in little over a page. Near the end of it, he states that "The French army broke up and fled in utter confusion. The old guard alone turned desperately to bay; and, hemmed in on every side by overwhelming numbers, perished in a manner worthy of its long and terrible renown". Splendid sentences for a sublime occasion; he goes on. "Ney fought on foot sword in hand, till he was swept down the stream of fugitives." Every English reader follows; Professor Hamburger has to add a "[by?]" after "down", an intrusion that ruins the flow without, on this side of the Atlantic, enhancing the sense.

Yet it would be churlish to complain of the immense amount of trouble the editor has taken to mount his find (or to be quite fair, his son's find: it was Philip Hamburger who made the essential discovery in Longman's archives at the University of Reading). This is an early work by a master of world standing, and to have it produced is enormously worth while.

M. R. D. Foot

Nationalism

Ireland: The Union and Its Aftermath
by Oliver MacDonagh
Allen & Unwin, £6.50 and £2.95
ISBN 0 04 941004 0 and 941005 9

This is a new edition of the author's *Ireland*, first published in the USA in 1968 as one of a series entitled *The Modern Nations in Historical Perspective*. It was immediately and widely welcomed as a penetrating and highly sophisticated analysis of modern Irish history.

Despite the different title and the understandable claims in the publisher's blurb, what we have here for the most part is excellent 10-year-old wine decanted skilfully into a new bottle. Here and there, sentences are tacked on to the existing text, some lengthy paragraphs are broken down and a few decorative verses are added. The bibliographical section should, perhaps, have been written *de novo* rather than updated in piecemeal fashion. There is also some evidence of an uncomfortable time lag between completion of the manuscript and date of publication.

But MacDonagh does give us some new wine after all, and it is excellent extra value for money. It comes in the form of a fresh chapter wherein he tentatively provides new historical perspectives for the momentous changes of the past 10 years. Here we have courageous reflections which make provocative and fascinating reading. Using the Whiteboy *motif*, he traces the notion of alternative government in modern Irish history. Here let me express my own view that rejection by Southern public opinion of the IRA is not to be dated to a sudden shrinking from the abyss in 1972 (the burning of the British Embassy was at once an aberration and a relatively inexpensive catharsis) but should be attributed rather to the maturing consequences of Irish statehood, rooted far back in the 1920s: few commentators have considered Irish citizenship and statehood as the formative identity experiences that they are.

MacDonagh goes on to consider afresh the complex texture of Irish nationalism, brilliantly separating the foreign from the indigenous strands. His footing is not so sure, however, when he sketches the parallel between Anglo-Irish relations in the 1780s and 1790s and Britain's modern policy in Ireland. Most of us have long since been aware of the dramatic aspects of the analogy, but the dissimilarities are enormous.

Finally, MacDonagh's warnings against the dangers of instant comment do not prevent him, any more than the rest of us, from falling into the fatal trap. Writing his book only a short time ago, he could be forgiven for thinking that Britain ardently desired disengagement and that the remnant of the Act of Union was under death sentence. When we consider the startling integrationist trends of recent months, we may well reflect that the process of dying will take an unconscionable long time, after all.

John A. Murphy

Led by an uncrowned king

The English Face of Irish Nationalism: Parnellite Involvement in British Politics, 1880-86
by Alan O'Day
Gill & Macmillan, £7.00
ISBN 0 7171 0816 3

With Dr Roy Foster's fine contextual study of Parnell and his family and Dr F. S. L. Lyons's definitive biography of Parnell following one another in recent months, it might be wondered if room remained for a third book featuring the uncrowned King of Ireland. Dr O'Day establishes his case.

Serious students will certainly wish to absorb the information patiently laid out in this examination of Parnell's party at work: its membership, their origins and interests; its activities and achievements. There are several shrewd insights and probing lines of inquiry too, even if some of the claims to the breaking of new ground are less obvious in the wake of the Foster and Lyons volumes.

It is the early years of Parnell's ascendancy—from the establishment of his leadership to the public conversion of Gladstone to Home Rule—that fascinate O'Day, who treats his subject thematically rather than chronologically. Examining party personnel, particularly the young, zestful leadership, he finds urban, Catholic, and lower class preponderances, with bachelorhood and English residence common. He then looks at the Liberal connexion, emphasizing the change in perspectives after 1882, and at party relations with the British radicals, with whom much sympathy existed, even if there was disagreement over denominational education.

The party's relations with the Conservatives forms one of the most interesting chapters. Tory views are seen to develop after the death of Beaconsfield and the enactment of land legislation in 1881, until by 1883 tenant purchase had become policy. They stood in contrast to the Liberals: "the Gladstone approach was Home Rule or nothing; Conservatives opposed Home Rule but were more favourable to other reforms, especially concerning the all-important land question".

O'Day next examines the role of the Irish in England, denying their electoral significance though emphasizing their utility to party spokesmen. Parliamentary tactics are also reviewed and the obstruction employed by the party is placed in its wider context of genuine parliamentary interests, constituency effort and effective question time and committee work. The party is also shown to have had some interest in specifically British issues—especially religious disputes, metropolitan matters, drink, and the law. Apart from Irish matters (their primary concern), foreign and imperial policy also attracted attention, with O'Donnell, O'Kelly, McCoan, Macfarlane and Nolan contributing from personal overseas experience.

O'Day is at his best however in his brief analysis of the impact of the 1885 election, his observations on Gladstone and the conclusions he draws from the party's experience in these formative years. Not only methods of organization and habits of thought, but personnel were acquired between 1880 and 1885, and the youth and vigour of the latter ensured that the former persisted to the First World War in near fossilized form.

The first Home Rule Bill, the visible expression of Parnellite success, and of a now binding link with the Liberals, changed political relations and party options irreversibly. In the subsequent years of division and weakness and of opposition to Tory control, the Parnellites nevertheless remained successful English parliamentarians. Playing a wise waiting game at Westminster, however, exasperated opinion at home and allowed the growth there of bolder ideals, until war and revolution finally left the party high and dry.

Parnellism in the 1880s gave expression to the wishes of the Catholics of Ireland, who sought to manage their own affairs. If, in the event, more violent methods finally severed the British connexion, the British parliamentary tradition persisted into their new state. That this is so adds further interest to the pages of this confident, competent, and informative study.

D. W. Harkness

According to liberal lights

British Appeasement in the 1930s
by William R. Rock
Edward Arnold, £5.95
ISBN 0 7131 5913 8

The title of Professor Rock's book may be misleading, since he is specifically concerned with British policy towards Germany under Neville Chamberlain from May 1937 until the outbreak of war.

The student approaching the subject for the first time sees before him a mountain of scholarly books and articles, and will be grateful for this rapid and judicious introduction, in which the footnotes served as a guide to further reading.

Separate chapters deal with the antecedents of Chamberlain's policy, the motive forces behind it, its main protagonists and its main critics. In a final chapter, "Appeasement in Historical Perspective", Rock sums up the pros and cons as he sees them, but regrettably fails to discuss the historiography of the subject.

Rock admits that the term "appeasement" is not only ambiguous but loaded, yet he persists in applying it as a tool of historical analysis. Once adopted in this way, "appeasement" can have great explanatory value, but only if we accept at least three assumptions which deserve to be questioned: (i) that at some point in the 1930s normal British policy gave way to a period in which a markedly contrasting line was taken; (ii) that policy during this distinct phase can all be related to a package of ideas or a programme labelled "appeasement"; (iii) that the main problem to be solved is the reason why British governments did not stand up to Hitler before September, 1939. In working on these assumptions Rock inhabits the traditional liberal universe of American students of the subject. While, therefore, he is prepared to believe that foreign policy had such high motives of decency as revulsion against war, and guilt feelings about the Versailles treaty, he feels bound to conclude that Chamberlain pursued a deluded policy rooted in a failure to understand the aggressive and expansionist creed of Nazi Germany.

Scholarship has travelled a long way on liberal reasoning of this type, but the end of the road must be in sight. The history of the 1930s is crying out for the insights of intelligent Marxists and indeed intelligent reactionaries. They will assume that British foreign policy in the period continued to serve the concrete interests of social stability and world power, and they will ask, as Maurice Cowling already has, how it was that Britain could ever have been pushed into a war over the independence of Poland, a state whose elimination would have virtually no effect on the balance of power.

Paul Addison

Reviewers

Maurice Bloch is lecturer in anthropology at the London School of Economics;
Margaret Boden, reader in philosophy and psychology at the University of Sussex, is author of Artificial Intelligence and Natural Man;
T. Scarlett Epstein is professorial fellow in the School of African and Asian studies at the University of Sussex.

STAR CHAMBER
Published June
The Cardinal's Court:
The Impact of Thomas
Wolsey in Star Chamber
J. A. Guy/£8.50
HARVESTER PRESS

BOOKS

Ideas out of context

The Social Anthropology of Radcliffe-Brown
edited by Adam Kuper
Routledge & Kegan Paul, £6.95 and £3.50
ISBN 0 7100 85567 and 85575

Adam Kuper's purpose in editing this collection of essays is to demonstrate the contemporary relevance of Radcliffe-Brown's social anthropology. His importance, according to the editor, derives from his "structural positivism"—a label presumably generated to distinguish Radcliffe-Brown's view of society from that of Malinowski—and from the clarity and simplicity of his analyses.

The lack of serious attention which his work receives today, on the other hand, arises out of the profound but secondhand influence he has had upon successive anthropologists—most notably through Lévi-Strauss, who was particularly stimulated by the 1951 essay on the *Comparative Method in Social Anthropology*—many of whom have used terms such as "social structure" in such a way that a burden of associations has accrued quite alien to Radcliffe-Brown's purpose. Simplistic misinterpretations of his work have therefore arisen, but in this book Kuper has done little to dispel them.

In his attempt to reestablish the relevance of Radcliffe-Brown's work in its own right, Kuper states that he is not here concerned to trace his influence on others, that he is at pains to avoid papers which "reiterate long-dead controversies" and he orders the material "roughly" in terms of content, even at the admitted cost of obscuring the development of ideas.

Thus, for example, we are offered a key chapter on social function which is collated from excerpts from *The Andaman Islanders* published in 1922 and from a seminar given in 1937. This is justified on the basis of the coherence and internal consistency of Radcliffe-Brown's work. Despite the laudable intention of reintroducing Radcliffe-Brown to a generation who tend to maintain a dismissive and often uninformed attitude to his work, Kuper has performed a disservice by wrenching his ideas out of the polemical context in which they developed.

The second major reason we are offered for this new collection of papers is that none of the existing collections are "representative of the full range of what he has to say to contemporary readers and contain a considerable amount of dross". Yet all the essays in this volume—with the possible exception of selections from *A Natural Science of Society*—are easily available elsewhere. We are offered the introduction from *Structure and Function in Primitive Society*, together with the papers "On Social Structure", "Religion and Society" and "On Joking Relationships" reprinted in the same volume; the introduction—slightly edited—from *African Systems of Kinship and Marriage*; "The Comparative Method in Social Anthropology", reprinted from *Method in Social Anthropology* and some early work—a chapter on Australian social organization and excerpts from *The Andaman Islanders*.

The fairly heavy editing of some of these pieces and certain omissions—most notably "On the concept of function in social science"—are, one assumes, attempts to eliminate the "dross" but the role of this collection in bringing about a positive revaluation of Radcliffe-Brown's work is doubtful.

Lon Fleming

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The uses of literacy

The Domestication of the Savage Mind
by Jack Goody
Cambridge University Press, £7.50 and £2.50
ISBN 0 521 21726 1 and 29242 5

The Domestication of the Savage Mind as its title suggests is a discussion of some themes raised in C. Lévi-Strauss's famous book *The Savage Mind*. It is, however, more than this. It represents a return to a field of study which has concerned Professor Goody at least since 1963—the significance of the introduction of writing for culture and society.

The fundamental argument of the book is as follows: anthropologists and others emphasized in a number of ways the difference they see between primitive and scientific thought or reasoning, they have argued over the nature of this "grand dichotomy" as Goody ironically calls it; but in the end they have kept this sharp contrast. Lévi-Strauss's book is one example of this and the distinction between "savage" and "domesticated", "hot" and "cold", are not really all that different from such oppositions as pre-logical versus logical, closed systems of thought versus open.

Goody objects to the grand dichotomy on two grounds. First, it is too sharp and he shows that there is no absolute division between the intellectual activity in traditional Northern Ghana and the scientific community. Second, Goody finds the dichotomy unhelpful. The reasons why one of the two types of thought occur in particular places or at particular times remains unexplained and as a result the conditions under which the passage from one type of thought to the other occurs are left unconsidered.

Goody's purpose is to fill this gap and he proposes that what has been noted as characteristic of the savage mind can be explained in terms of the absence of literacy while the scientific mind can be explained by the presence of literacy. The passage from one to the other, the domestication of the savage mind is, it is argued, due to changes in the mode of communication implied by the introduction of writing and ultimately printing. In this way the dichotomy loses its racialist overtones and is explained by a testable hypothesis.

Accompanying this central argument is a secondary one; that many of the ways in which anthropologists have tried to represent the thought of preliterate societies are misleading because they have used such inflexible and over-systematic devices as tables and charts which, far from reflecting preliterate thought, are in fact, historically, the very tools which transform it into something else: scientific thought.

Goody attributes a wide range of changes in intellectual systems to the presence of the written word. First of all he emphasizes how the notion of the individual creator in the literary field is dependent on writing, on comparing back to an original. This is also true of modern history with its emphasis on checking facts against documents. The growth of logic and critical thinking is also linked to literacy since it implies comparison of alternatives and lengthy examination of a fixed object. Most generally, experimental scientific thinking is seen as the end process of the use of a variety of literate products which include at their simplest mere lists, lists which develop into recipes whether for food preparation or medicine and which in turn ultimately clear the way for the comparison of "recipes" by experiment.

This is an exciting thesis indeed, and we must all be grateful to Goody for pointing inquiry into such an obviously important, relevant and studiable direction. All the suggestions here about the effects of literacy engender many others and more work on this topic must be undertaken; as a field it offers a pleasant contrast to the often irrelevant and sterile concerns of many anthropologists. None the less inevitably certain criticisms of the book occur; some more significant than others.

First, in taking *The Savage Mind* as its target Goody is dealing with a very slippery object. It is far from clear that Lévi-Strauss intended many of the opinions attributed to him; in particular Lévi-Strauss is much less concerned with the contrast between the savage and the domesticated mind than with the similarity and the nature of the former. Goody's criticisms of Lévi-Strauss's views on this are [illegible] pushed very far, except for the implication that many of the features which Lévi-Strauss attributes to the savage mind are, in fact, more characteristic of certain literate cultures. Goody's argument on the whole moves at another level to Lévi-Strauss's, and although it might be a more fruitful level, it is not an alternative.

Second, I find the argument generalizes from too few examples. This is perhaps inevitable in so short a book but, for example, the conclusions Goody draws from his outstanding study of the Bagre Myths of West Africa are not borne out by what we know from studies of different preliterate cultures such as Tikopia where much greater stability of form is recorded. Similarly the great interest in what Hymes calls "talk about talk" in non-literate cultures seems to be denied in some passages of this book.

My main criticism, however, is of a different sort. It is that in a book dedicated to the study of the effects of literacy there is in fact little detailed study of this very process. There is much more about the nature of non-literate cultures, and therefore only by implication about literate cultures, than direct studies of the effects—social, political, intellectual or artistic—of the introduction of writing. Many examples are alluded to but never at any length with the possible exception of that rather esoteric example of a literate society, St John's College, Cambridge.

Perhaps this last criticism is rather a call for other books on the same topic. It seems a pity that our knowledge has only advanced a little since the early 1960s. It should not be forgotten, however, that we are made to feel this by the highly stimulating way Goody has introduced this crucial topic.

Maurice Bloch

An Indian village from memory

The Remembered Village
by M. N. Srinivas
University of California Press, £10.50
ISBN 0520 02997 6

Just as drowning men clutch their lifelines, social anthropologists cling to their fieldnotes. It is therefore understandable that M. N. Srinivas felt distraught when all three copies of his notes, which he had processed over a period of 18 years, were destroyed in a fire started by arsonists at the Palo Alto Center for Advanced Study in the Behavioral Sciences, where he had gone for the specific purpose of writing up his anthropological research conducted in Rampura, a South Indian village. It was Professor Sol Tax, colleague and contemporary at the centre, who suggested to Srinivas that he should not mourn the loss of his notes, but rather forget about them altogether and attempt writing from memory. This is what Srinivas did.

The book he produced is in many ways unique: on the one hand it is plainly written by a senior social anthropologist, yet it lacks most of the facts, figures and hypotheses which are usually basic to anthropological treatises; then again it has the quality of a first-rate novel, yet it has no story or plot. Because he was forced to write from memory it was obviously easier for him to describe those Rampura events and personalities which had made the biggest impression, than if he had felt obliged to refer to detailed field notes. The author has managed to combine successfully the professional approach of an anthropologist with that of a novelist to the description of an Indian village community. Reading about the various village characters one begins to think that one knows them personally, while the account of the village scene itself makes one almost smell Rampura's cow-dung and manure heaps.

The portraits of "Three Important Men" in chapter three, particularly that of Rampura's headman, illustrate how efficient "Big Men" manage to establish and maintain their dominance as patrons over a large and increasing number of dependants. The author also depicts for us a number of the different types of personality he found among the many clients of these village patrons: for example, Kullaya, the old leader of the Harijans, who was respectful of the distance between him and the higher castes and Pijja, a young and resourceful Harijan, who opposed those high caste men who tried to do him out of his due or slighted him. All the characters described seem strikingly familiar; we all know some men of these types in our own society.

Few anthropological studies have seriously considered Indian folk religion; Srinivas's own treatment of the subject is highly illuminating. He questions the crippling effect on social endeavours of the "fatalistic" ideology of Indians which foreigners usually emphasize. Instead he explains that villagers expressed fatalism only with respect to sudden misfortunes *post facto*, but that it did not dissuade them from taking precautions to avoid disasters wherever possible. Srinivas, himself a Brahmin who originates from the region in which he conducted his study, is able to grasp the inner meaning of folk religion.

His analysis of the merger between theological Hinduism and folk religion in the village context is summarized in his statement that "villagers viewed their relations with deities in much the same way as they viewed their relations with each other. There was this difference, however, that the deities were vastly more powerful, and also more difficult to understand and predict than human beings. When one deity failed a devotee, he approached another."

There are many other aspects of this book which are of topical interest in spite of its "historic" account. For instance, in discussing "The Changing Village" (chapter eight) the author pinpoints what is still the crux of rural development when he says that if villagers "were unenthusiastic about an innovation which urban officials and local or foreign experts had thought up, it was because the latter were insensitive to the full implications of the innovation at the village level. While the ploughman thought of how well the new blade penetrated the soil, the worms underneath may be pardoned for taking a different view".

Srinivas has made a virtue out of the misfortune of losing all his field notes: *The Remembered Village* is a piece of art which is bound to become a classic of Indian ethnography.

T. Scarlett Epstein

BOOKS

Backyard view

African Metropolis: Nairobi's Self-Help City
by Andrew Hake
Sussex University Press, £10.00
ISBN 0 85621 066 8

Nairobi is a schizophrenic place, with its plush, jetset centre and gracious European suburbs. It often provokes from tourists the comment that it does not seem like an African city. Andrew Hake's subject is the relationship between this Nairobi and the backyard the tourists rarely see—the self-help city. He is well qualified for the task; he worked in Nairobi for 12 years as a social worker for the National Christian Council of Kenya.

The first part of the book traces the history of the relationship between the modern city created by and for Europeans and Asians, and the Africans who came to work in it, from the town's founding nearly 80 years ago, to the present. The author shows that, while Africans were needed in the city, they were regarded as transients rather than bona fide residents, and inadequately provided for throughout the colonial period. Official housing policy, consistently unrealistic about the amount of housing needed, has especially reflected this attitude. When, after independence, a large-scale building programme was finally initiated by the city council, it tended to build housing too expensive for the majority of Africans. In the circumstances, a policy of building for tenant-purchase merely created wealthy sub-letting landlords, rather than benefiting the general population.

How have Africans themselves responded to the uncertainties of their situation? In the second part of his book, the author demonstrates the ways in which they have created the conditions which make it possible for them to go on living in Nairobi. By 1971, a third of Nairobi's population of half a million were living in unauthorized housing and had created 50,000 jobs for themselves outside, though indirectly dependent upon, the modern sector.

It is the author's contention that the vigour of this other Nairobi should be recognized and encouraged, as providing a more realistic blueprint for the future development of the city than those of city council planners. What he documents, however, is the almost constant harassment which this sector has suffered. Officialdom has feared the rate at which people have arrived in the city, and has been ruthless at times in attempting to deter them, destroying areas of temporary structures without making any alternative housing provision for their inhabitants, and often at almost no notice.

Plainly it was hoped that surplus urban population would just melt away, returning presumably to the rural areas. "Back to the land" has been a constant cry in Kenya in recent years. What Andrew Hake shows convincingly is that such measures take no account of reality. Residents in such housing *average* over 16 years' residence in Nairobi, and most either have no land to return to, or own land already so over-occupied that there is no point returning to it. Ninety-six per cent of respondents in a survey conducted in 1970 said that if their houses were destroyed, they would remain in Nairobi.

Given these facts, the book's exploration of how the city's marginal residents provide work, housing and a great range of welfare services for themselves will, one hopes, set local planners thinking with more imagination. For the more general reader, too, the book makes fascinating reading because it is so rich in detail. Warm and lively writing is rare in books containing as much careful scholarship as this one, and it is perhaps because the author writes as the champion of the people he worked with that the reader emerges, at the end of the book, with such a sense of friendly familiarity with Nairobi's poorest suburbs.

One small quibble: the book is the poorer for having no proper bibliography.

Gillian Shepherd

Con men and dupes?

Patrons and Clients
edited by Ernest Gellner and John Waterbury
Duckworth, £12.00
ISBN 0 7156 0941 6

Words like patron and client have been used to describe and discuss relations of power for centuries—in Latin for two thousand years. Recently, anthropologists, sociologists, political scientists and historians have attempted to use them for systematic comparative description. Some attempt to uncover a "theory"; others are keen to take credit for destroying one.

Twenty-eight people met in Rome in November 1974 to pursue this enterprise, as clients of the American Universities Field Staff. Nineteen of the offerings are printed here, together with three more, written subsequently. Ernest Gellner opens and John Waterbury concludes in general terms; two other papers are theoretical (James Scott on peasant security, Alex Weingrod on power), and the rest report on specific situations in particular countries of Europe, the Middle East and North Africa. Topics vary from tribal ethnography, through villages, to the cliques of top politicians and national history.

The captain chose his team well. Papers vary from competent upwards, and all are interesting. None exceeds 22 pages, but not all succeed in ordering their exposition with the same degree of mastery of fact, and lucidity of concept.

Almost every paper attempts a definition, some at serious length. Some authors assume theories, others discuss them. But the book automatically provides its own "spiteful ethnography"; virtually all theories are refuted by some one else's data—unless we save them by the standard device of defining the contrary evidence as not true patron/client relations.

Gellner, Waterbury and others recognize the impossibility of legislating about precisely where the boundaries of words come. I doubt whether cliques of rough equals immediately under Nasser and Sadat (Moore), or ways of bending the rigidities of communist bureaucracy (Ionescu), or shopping around to find a personal link to secure a particular bureaucratic favour should really be called patronage or clientelism.

Among Peters's Bedouin, and in the past in many political units, inequality was legitimate and normal. Social superiors were intrinsically better, and the poor were compelled to trade something—loyalty, obedience, orthodoxy—for indispensable resources—land, cattle, employment. In such cases the system functions and can be described in terms which make it sound acceptable. But most contemporary cases of patronage, as Gellner remarks, have overtones of being not quite nice; cliques, vote-buying, strongarm urban gangs, landowners keeping out development.

These cases are doubly interesting. They raise first two general moral issues; inequality, and corruption. Those who argue that all patrons are confidence tricksters—albeit unconsciously—and all loyal clients are dupes seem to me to win the argument. Some clients may use their personal ties to mitigate their miseries, but that does not make clienthood a good thing.

All the same, we can ask must all morally accepted inequality be evidence of moral nastiness? As Gellner says, in modern states clientelism seems to go with inefficient bureaucracy, imperfect markets, and deficient political parties. Yet one main reason for the interest in this subject is the increasing interest in what happens as modern states are established in recently poor, traditional societies.

What do such examples have to do with the goings on in New York, for example? Are some kind of informal improprieties in complex societies inevitable, even desirable? Why do virtually all "developing" states seem to have fairly well-organized patron/client systems? Should we disapprove? Or is disapproving just being ethnocentric, and legitimizing the international patronage of the industrial west?

The last issue raises an even more fundamental one. Silverman sets the tone by arguing in the second paper that what the people in a society tell anthropologists about the morality of their patron/client links must not be treated as true. This issue recurs. Patrons' perceptions and values are always in their own interest. Clients are constrained to accept them by fairly tough practical sanctions, and [illegible] in their own subordination (for exploitation) by their personal loyalty to individual patrons, and to the system.

The current values and beliefs of a society are, it is said, to be recorded and explained, but must not be borrowed as themselves a true and adequate social analysis. But this in turn raises another now familiar problem. Is the ideology of the social scientist himself any more reliable? These particular essays illustrate an interesting range of ideologies, from fairly simple functionalism to a belief in "deep structures" yet to be discovered.

Paul Stirling

Compulsory reading

Primitive Government: A Study of Traditional Political Systems in Eastern Africa (revised edition)
by Lucy Mair
Scolar Press, £6.00 and £3.00
ISBN 0 85967 364 2 and 361 8

When *Primitive Government* appeared 15 years ago (at a price of 4s 6d) it established itself immediately as one of those textbooks which one simply took for granted every anthropology student would have—and quite likely have by heart.

Lucy Mair writes an enviably strong and simple English, with a clarity of reasoning to match her style. She knows that it is the function of a teacher to make rough places plain, not to make the already complex more baffling still. Anything pretentious or high-flown is a prompt victim to her well-directed fire. It is no disparagement of these qualities of analytic lucidity to say that they appeal particularly to the empirical, down-to-earth temper that is supposed to define the characteristically British approach to intellectual disciplines.

Teachers felt themselves bereft when Penguin allowed the book to go out of print, so it is very good news that it has now reappeared under a new imprint and in a new edition.

The publishers claim a substantial revision, but this does not add up to very much. Phrases like "Kenya today..." have been changed to phrases like "Kenya until 1966..." throughout, but aside from this the most important new material is the introduction of P. H. Gulliver's work on the Arusha, which appeared just too late (1963) for the original edition. This is rightly given prominence in the section on age-organization and could usefully have been brought in elsewhere as well: for instance, in discussing ancestor cults, and again in the closing account of the impact of colonial and post-colonial administrative change. The concluding chapter, which deals with such changes and generally brings the study into the mid-1970s, is the only part of the book to have been rewritten.

As so often happens, revision brings some errors in its train. The entries for Gusii and Turkana are mis-spelled in the index, and Dr James Woodburn, the ethnographer of the Hadza, is unaccountably referred to as Woodford throughout. It is perhaps a pity that Professor Mair did not reconsider her rather niggardly policy towards bibliography.

A re-reading of the book recalls some old reservations and prompts a few new ones. From its first appearance, the title, with its implications of generality, seemed too large for a study that was limited not merely to Africa but to a particular corner of Africa. West, north, central and southern Africa receive as good as no attention at all, with the result that much of the most exciting work in modern anthropology, both descriptive and analytic, is ignored.

The chapters on centralized government, its expansion and its relationship to lineage structure and to subordinate groups and associations would have gained from at least a glance at standard West African material; and the long sections on chieftainship in the Interlacustrine Bantu kingdoms could be misleading when the significantly different polities of the chiefly Bantu societies of central and southern Africa are not mentioned at all. The revision makes virtually no concession to this line of criticism, beyond the addition of a sub-title to make explicit the circumscription of her field. There are of course advantages as well as drawbacks in her method, but once again her policy of exclusion has been rather ruthless. She could have preserved the valuable unities which her limits impose while allowing her readers a glimpse of political worlds beyond.

Changes in the theoretical focus of anthropology since 1962 provoke further questions. Political anthropology of the kind at which Lucy Mair is so adept has (perhaps to our loss) suffered a marked decline. The nearest approach to it which survives and perhaps retains some vigour lies in the anthropology of law, but she has incorporated practically no new material from this field.

Aside from that, the "new ethnography" has tilted the discipline sharply away from her style of analysis and her level of interest. Structuralism and Marxism have between them largely refashioned the intellectual landscape, the latter in particular bearing directly on many of her concerns. The book reflects nothing of these powerful new forces in anthropology. Her assertion that "Marxists see all government as a device for the extortion of surplus value" (page 160) fits no thinking Marxist of my acquaintance and there is no other reference to Marxism in the book. In these ways again, she has stuck to her guns but the loss in terms of contemporary theoretical relevance is both more obvious and more damaging.

Despite these reservations, Professor Mair remains a most keen-eyed sharpshooter, and it is a stimulating experience to read her book again and test one's ability to pick one's way unscathed through her field of fire. It is still the best book of its kind on the market.

Ian Hamnett

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SENIOR LECTURER/LECTURER IN BUSINESS ADMINISTRATION
SCHOOL OF ECONOMIC AND FINANCIAL STUDIES
The appointee will join a group of senior academic staff engaged in the direction of the University's graduate programmes in the field of business administration. The University's graduate programmes currently include the IBA, the Graduate Diploma in Business Administration and several executive programmes, including the Advanced Management Programmes.
Candidates should preferably have interests in accounting and in another field of management, such as (but not restricted to) [illegible] quantitative methods, marketing, management of technology or information systems; however, well qualified candidates from any relevant field of management will be considered.
Candidates should have strong tertiary qualifications and a record of research in their field of interest. Experience in a managerial or consulting capacity would be an advantage and candidates should be effective in instructing mature students, including senior executives, and in relating their research interests to the practice of management.
December 31, 1977.

LECTURER IN STATISTICS
Applicants should have either strong qualifications in statistics or an interest in statistics and a strong qualification in operations research, computer science or demography.
The successful candidate will be expected to help with the development of the undergraduate programme in statistics, which includes courses in theoretical and applied statistics, probability, operations research and computing. There are excellent opportunities for research, particularly interdisciplinary work with behavioural scientists, biologists, earth scientists and other professionals at Macquarie University, C.S.I.R.O. and other Universities in Sydney. Good computing facilities are available.
January 15, 1978.

KATHOLIEKE UNIVERSITEIT NIJMEGEN

prof. general philosophy of science

The Central Interfaculty (Department of Philosophy) of the Catholic University, Nijmegen, the Netherlands, experts to appoint shortly a full professor for the newly-established chair in the general philosophy of science.
Applicants should have a special interest in the philosophical reflection on the structure and dynamic of the sciences.
Preference will be given to candidates who, in their publications, have shown familiarity with the social sciences.
Foreigners will be asked to acquire fluency in Dutch within two years of appointment. Information and applications:
Prof.Dr.J.Plat, c.m.
Chairman Appointments Committee
Filosofisch Instituut
Erasmuslaan 40
Nijmegen.
The Netherlands.

centrale interfaculteit directoraat a-faculteiten

UNIVERSITY OF DUBLIN
Trinity College

CHAIR OF LATIN
(1870)

Applications are invited for appointment to the above post which will fall vacant on October 1, 1978, following the retirement of the present holder Professor D. E. W. Wormell.

Further particulars, both of the present activities of the department of Latin and of the School of Classics, together with conditions of employment to the Chair and to the Headship of the department, may be obtained from Mr. G. H. H. Giltrap, Secretary to the College, Trinity College, Dublin 2, to whom formal application should be made, preferably not later than January 23, 1978.

CHELSEA COLLEGE
University of London

Academic Registrar

Applications are invited for the post of Academic Registrar at Chelsea College. Duties will include coordination of all academic matters within the college, as well as responsibility for the work of the College Registry itself.

A knowledge of the academic structure and organisation within the University of London would be desirable although not essential. The salary will be in the Grade IV academically related range (minimum £8,106 pa, plus £460 pa London Allowance). Further particulars can be obtained from the Personnel Officer, Chelsea College, Manresa Road, London SW3 6LX, to whom applications should be sent by 9 January, 1977.

UNIVERSITY OF WESTERN AUSTRALIA
Perth
LAW

Applications are invited for appointment to two positions of

SENIOR TUTOR

in the Law School. For one of the posts preference will be given to candidates with practical experience, teaching experience, or both, in Conveyancing. One appointment will be a temporary one for a period of two years initially. Current salary range $A12,593-$A14,445 p.a. Permanent conditions of appointment will include superannuation similar to FSSU, fares to Perth for appointee and dependent family, removal allowance, study leave and long-service leave and housing loan scheme. The temporary appointee will be entitled to the same fares and removal allowances and, on completion of two years service, to similar repatriation benefits to place of engagement. Further information including conditions of appointment may be obtained from the Staffing Officer.
Applications in duplicate stating full personal particulars, qualifications and experience should reach the Staffing Officer, University of Western Australia, Nedlands, Western Australia, 6009, by 7 January, 1978. Candidates should request three referees to write to the Staffing Officer.

THE UNIVERSITY OF THE WEST INDIES—TRINIDAD

Applications are invited for the post of

PROFESSOR/SENIOR LECTURER
in the DEPARTMENT OF MATHEMATICS

The main purpose of the post will be to direct research in the department. In selecting candidates for the post, preference will be given to persons with area of specialisation in one of the following: Analysis, Computing, Differential Geometry, Graph Theory, Statistics. Salary scales 1977-78, Professor TT$36,720 to TT$45,480 p.a. Senior Lecturer TT$25,827 to TT$34,017 p.a. (£1 sterling equals TT$4.32). FSSU. Unfurnished accommodation if available at 10 per cent or furnished at 12½ per cent or housing allowance of 20 per cent of pensionable salary. Up to five full economy passages on appointment and normal termination. Study and Travel Grant. Detailed applications giving full particulars of qualifications and experience, date of birth, marital status and the names and addresses of three referees to Secretary, UWI, St. Augustine, Trinidad, as soon as possible. Details of the post sent to all applicants.

Universities continued

UNIVERSITY OF SOKOTO NIGERIA

Applications are invited for the following posts in ENGLISH:—

1. **PROFESSOR of English**
2. **READER/SENIOR LECTURESHIP in English**
3. **LECTURESHIPS (2) in English**

The posts will be held in the Department of Modern European Languages, the prime responsibilities of which will lie in English. Candidates for posts 1 and 2 should have interests in English Literature encompassing one or more of the main branches of Literature including American Literature, Commonwealth Literature and West African Literature. A developed interest in English Language will be an advantage. The department will be required to offer some English Language and Literature courses to students of the Faculty of Education and language tuition to first year students in other Faculties.

Applicants for the post of Lecturer may have similar interests to those defined above. One of the Lectureship posts will be filled by an applicant at least as strong on the language side as on the literature side.

The University of Sokoto is a new university presently occupying a temporary campus and expects to develop rapidly. An ability to improvise will be a major asset in the coming two-three-year period during which time the department will be expected to assist in the planning of the new university shortly to be erected on its permanent site. The University of Sokoto would welcome applications from would-be secondees from British universities.

SALARY SCALES	Naira	£ Sterling
Professor	N11,268-N12,420 p.a.	(£9,549-£10,525 p.a.)
Reader	N8,868- N9,828 p.a.	(£7,515- £8,328 p.a.)
Senior Lecturer	N7,764- N8,724 p.a.	(£6,579- £7,393 p.a.)
Lecturer	N5,460- N6,984 p.a.	(£4,627- £5,918 p.a.)

(£1 sterling equals N1.18.) There may be supplementation of salaries for Senior Lecturers, Readers and Professors in range £2,892 to £3,160 p.a. (sterling) for married appointees or £NIL to £726 p.a. (sterling) for single appointees (usually reviewed annually and normally free of all tax) and provide children's education allowances and holiday visit passages. This supplementation is unlikely to be provided for appointments at Lectureship level. Pension Scheme; biennial overseas leave; study and travel grant; car allowance, part-furnished accommodation at rentals not exceeding N300 p.a. or rent allowance in lieu (where applicable). In addition a contract bonus (partly taxable) of 25 per cent is payable on contract appointments. Detailed applications (two copies) including a curriculum vitae and naming three referees should be sent by air mail by January 3, 1978 to the Registrar, University of Sokoto, Private Mail Bag 2346, Sokoto, Nigeria. Applicants resident in UK should also send one copy to Inter-University Council, 90/91 Tottenham Court Road, London W1P 0DT. Further particulars are available from either address.

SCHOOL OF AUTOMOTIVE STUDIES
RESEARCH IN STEERING SYSTEM VIBRATIONS

Applications are invited from candidates with good honours degrees to be part of a Science Research Council sponsored project team, for a period of 3 years, investigating suspension and steering characteristics of a vehicle subjected to tri-axial dynamic random inputs.

Good mathematical knowledge and some experience in the use of instrumentation will be an advantage. Opportunities exist for obtaining an MSc and PhD, for suitable applicants.

Remuneration will be according to qualifications, experience and individual circumstances.

Forms and further particulars from:
School of Automotive Studies,
Cranfield Institute of Technology,
Cranfield, Bedford MK43 0AL
Tel. 0234-750111 Ext. 530

Cranfield

UNIVERSITY OF CAMBRIDGE
Department of Anglo-Saxon, Norse, and Celtic

University Lecturer or University Assistant Lecturer to take up appointment on October 1, 1978. The successful applicant will be the only teacher in the Department for all undergraduate and post-graduate work in the history of England from the Anglo-Saxon settlements to the Norman Conquest. The appointment will be for three years with the possibility, for a University Lecturer, of reappointment to the retiring age, or, for a University Assistant Lecturer, of reappointment for two years.
Scale of stipends: for a University Lecturer, £4,617 a year, rising by 12 annual increments to £7,087 subject to certain deductions for college emoluments; there is no grade of Senior Lecturer; for a University Assistant Lecturer, £3,547 a year, rising by four annual increments to £4,403, subject to certain deductions for college emoluments.
Further information may be obtained from the Secretary, Appointments Committee, English Faculty, 9 West Road, Cambridge CB3 9DP, to whom candidates should send their applications (10 copies), with the names of not more than three referees, to reach him not later than January 6, 1978.

University of Wales
UWIST

DEPARTMENT OF CIVIL ENGINEERING AND BUILDING TECHNOLOGY

DEMONSTRATOR
(to work for PhD)

In the field of geotechnical engineering; experience or Master's degree in soil/rock mechanics required.
Salary: £2,904-£3,119-£3,333.
Requests (quoting Ref THES) for details and application form to Personnel Section (Academic), UWIST, Cardiff CF1 3NU.
Closing Date: 5 January, 1978.

ABERYSTWYTH
THE UNIVERSITY COLLEGE OF WALES
DEPARTMENT OF LAW

Applications are invited for two posts of LECTURER, tenable from 1st October, 1978. Salary on the scale £3,333 to £6,655 per annum (under review).
Application forms and particulars available from the Registrar, Old College, King Street, Aberystwyth.
Closing date: 9th January, 1978.

CARDIFF
UNIVERSITY COLLEGE

Applications are invited for the post of ASSISTANT REGISTRAR in the REGISTRY.
Salary range, Grade 2: £5,425 to £6,655. Duties to commence as soon as can be arranged.
Applications (two copies), together with the names and addresses of two referees, should be forwarded to the Vice-Principal (Administration) and Registrar, University College, Cardiff CF1 1XL, from whom further particulars may be obtained. Closing date 9th January, 1978. Please quote reference 1376.

University of Cambridge
DEPARTMENT OF GEOGRAPHY
Hunting Group Scholarship

The Scholarship is intended to provide opportunity for research in contemporary problems of regional development concerned with the uses and development of natural resources. It is tenable from 1 October, 1978 for one year in the first instance and may be renewed up to a maximum of three years. The value of the Scholarship is related to the maintenance grants payable by Research Councils, at present £1,475 p.a., plus approved fees.
In addition, financial assistance will be available towards the cost of travelling in connection with the Scholar's research. The successful candidate will be required to become a registered Research Student in the University.
Further details may be obtained from the **Head of the Department of Geography, Downing Place, Cambridge CB2 3EN,** to whom applications should be sent by **January 31st, 1978.**

UNIVERSITY OF THE WEST INDIES JAMAICA

Applications ar invited for the posts of **RESEARCH FELLOW AND JUNIOR RESEARCH FELLOW IN THE REGIONAL PROGRAMME OF MONETARY STUDIES, INSTITUTE OF SOCIAL AND ECONOMIC RESEARCH.** The appointment will be for a period of two years. The appointees may be required to work in the field of Organization and Structure including efficiency analysis of commercial banking and/or balance of payments of Caribbean economics, and will be required to conduct field work in one or more member countries of the Caribbean community. Salary scales 1977/8—Research Fellow: J$8,913-J$13,917 p.a. Junior Research Fellow: J$7,236-J$8,412 p.a. (£1 sterling = J$2.27). Unfurnished accommodation will be let by the University at a rental of 10% of salary. If, however, the staff member provides his own accommodation, he will be paid a housing allowance of 20% of his pensionable salary. F.S.S.U. Up to five full passages (at approved rates) will be provided on appointment and on normal termination. Annual Study and Travel Grant. Detailed applications (three copies) giving full particulars of qualifications and experience, date of birth, marital status and the names and addresses of three referees should be sent to the Registrar, University of the West Indies, Mona, Kingston 7, Jamaica, W.I., as soon as possible. Further particulars of the post are available from the same source or from the Inter-University Council for Higher Education Overseas, 90/91 Tottenham Court Road, London W1P 0DT.

UNIVERSITY OF CAMBRIDGE
Faculty of English

The Appointments Committee of the English Faculty wish to appoint, from October 1, 1978, a University Assistant Lecturer in the field of medieval literature. The appointment will be for three years with the possibility of reappointment for two years.

Scale of stipends: £3,547 a year, rising by four annual increments to £4,403, subject to certain deductions for college emoluments.

Further information may be obtained from the Secretary, Appointments Committee, English Faculty, 9 West Road, Cambridge CB3 9DP, to whom candidates should send their applications (10 copies), with names of not more than three referees, to reach him not later than January 6, 1978.

LONDON
THE UNIVERSITY
KING'S COLLEGE
FACULTY OF ENGINEERING

Applications are invited for the part-time post of ADMINISTRATIVE ASSISTANT to the Faculty of Engineering from men or women graduates, preferably with some industrial experience. The post is tenable as soon as possible, and will be on a two days per week basis, and subject to workload may be for term time only (approximately 30 weeks per year). Candidates should have an interest in the planning and coordination of the activities of a medium scale academic unit. Ability to communicate easily with staff and students, and to establish external relations with schools, Government organizations and industry is also required. The successful candidate will be paid, pro-rata, at an appropriate point on the Academic Related 1B Scale, currently £2,927 to £4,811 per annum plus £460 London Allowance, but under review.
Application forms and details of the post are available from the Secretary (Ref. 177498/THES), University of London King's College, Strand, WC2R 2LS, and should be returned as soon as possible.

BIRMINGHAM
THE UNIVERSITY
DEPARTMENT OF GEOGRAPHY
LECTURESHIP IN PHYSICAL GEOGRAPHY

Applications are invited for the above post. Candidates should have interests in biogeography and/or hydrology.
Salary on the scale £3,333 to £6,655 (under review) plus superannuation.
Further particulars from the Assistant Registrar, Science and Engineering, University of Birmingham, P.O. Box 363, Birmingham B15 2TT, to whom applications (three copies including full curriculum vitae and naming three referees) should be sent by 30th December 1977.
Please quote ref. 1102.

BRADFORD
THE UNIVERSITY
SCHOOL OF SOCIAL SCIENCES
TEMPORARY LECTURER IN SOCIAL PSYCHOLOGY

Applications are invited for the above post, which will be for two years in duration and is to be filled as soon as possible. Candidates should be able and interested in working with other social scientists. Salary within the range £3,333 to £6,655 (under review).
Further details and application forms from the Registrar, Post R0/L/12 [illegible], University of Bradford, West Yorkshire BD7 1DP.

BRISTOL
THE UNIVERSITY
SCHOOL OF EDUCATION
RESEARCH ASSISTANT FOR SCHOOLS AND IN-SERVICE TEACHER EDUCATION
EVALUATION PROJECT

Applications are invited for the post of temporary Research Assistant in the School of Education Research Unit for work on two D.E.S.-funded projects. The major part of the work will be on the Schools and In-Service Teacher Education Project which will evaluate an action programme of in-service provision for teachers in four schools. In addition, there will be some data processing work on the Teacher Induction Pilot Schemes project.

Applicants should have a background in psychology or social psychology and preferably some experience of interviewing, questionnaire surveys and attitude tests. Teaching experience will be particularly welcomed.

The salary range will be from £2,904 to £3,761 per annum (scale under review); starting point according to age, qualifications and experience. The appointment will be for one year only and will be made from 1st March, 1978, or as soon as possible thereafter. Secondment should be possible in appropriate circumstances.

Applications giving details of qualifications and experience and names and addresses of three referees should be sent by January 10th to: The Secretary, School of Education, Helen Wodehouse Building, 39 Berkeley Square, Bristol, from whom further particulars can be obtained.

UNIVERSITY OF CALGARY
DEPARTMENT OF ENGLISH
Vacancy for 1978-1979
(Subject to funding)

Area: Old English; Composition; at least one other area of scholarly and teaching competence.
Rank: Open.
Qualifications: Ph.D. in appropriate field; teaching experience.
Salary: Dependent on qualifications and experience. Current scales: Assistant Professor $17,900 to $28,281. Associate Professor $21,908 to $30,159. Professor $30,061
Applications, along with curriculum vitae and list of three referees to: Dr. H. Dahlie, Head, Department of English, The University of Calgary, Calgary, Alberta, Canada T2N 1N4.
Commencing date: July 1, 1978.

SOUTHAMPTON
THE UNIVERSITY

Applications are invited for the post of SECRETARY and REGISTRAR which will become vacant on 1 October, 1978. The Secretary and Registrar is, under the Vice-Chancellor, the chief administrative officer of the University. Salary in Administrative Grade IV with superannuation under Universities Superannuation Scheme or, if applicable, Federated Superannuation System for Universities.

Further particulars may be obtained from the Vice-Chancellor, University of Southampton, Highfield, Southampton SO9 5NH, to whom applications (United Kingdom candidates 10 copies, others one copy) should be sent not later than 20 January, 1978.

THE BRITISH COUNCIL

Invites applications for the following posts:

COMMUNICATION SKILLS IN ENGLISH PROGRAMME
(Saudi Arabia)

KING ABDUL AZIZ UNIVERSITY
Mecca

This programme has been developed at the Jeddah campus of KAAU over the last 2 years with British Council professional support and has involved the production of specialised teaching materials for the implementation of English-medium courses in the Faculties of Engineering and Medicine.

Required for 1st February, 1978, for the Faculty of Engineering: teachers of English with Science background or teachers of Science with postgraduate qualification in interest in English Language. Graduates, not only with a TEFL and experience or interest in teaching English for science and technology. In the case of science graduates the TEFL qualification may be waived. As the teachers will work in Mecca, applications can only be accepted from Muslims.
Salary SR 5,311-5,726 per month (current rate of exchange SR 6.44 = £1).
Benefits: Free furnished accommodation is provided, but single candidates will be required to share. 60 days leave per year. Probably 1 year contracts but contracts for 6 or 18 months may be possible. 77 AU 157-9

INSPECTORS OF ENGLISH—PRIMARY
(Cameroon)

Educational Delegations for the East and North Provinces—Bertoua and Garoua. 2 members of a team concerned with the introduction of English in Francophone Primary Schools. To inspect classes, advise teachers and organise in-service courses. Degree (preferably in English or Modern Languages), 1 year University diploma in TEFL, relevant experience preferably including teacher training. Fluent French. Men only.
Salary £4,580-£5,618 per annum plus 10 per cent inducement.
Benefits Personal and children's allowances, free accommodation. 2 year contract. 76 HE 5-6.

ELT ADVISER
(Cameroon)

South West Provincial Delegation for Education, Buea

To advise on English Language teaching at Primary, Secondary and Teacher Training levels. Degree, teaching qualification and M.A. in Applied Linguistics (or 1 year University diploma in TEFL/TESL); at least 4 years' relevant experience, preferably overseas and in teacher training; good French.
Salary: £4,580-£5,618 per annum plus 10 per cent inducement.
Benefits: Personal and children's allowances; free furnished accommodation. 2 year contract. 77 HE [illegible].

Return fares are paid. Local contracts are guaranteed by the British Council. Please write briefly stating qualifications and length of appropriate experience, quoting relevant reference number and title of post, for further details and application form to The British Council (Appointments), 65 Davies Street, London W1Y 2AA.

DURHAM
THE UNIVERSITY
CHAIR OF PURE MATHEMATICS

Applications are invited for a CHAIR of PURE MATHEMATICS in the Department of Mathematics to be filled from 1 April, 1978, or such later date as may be arranged.
The appointment will be made on the Professorial salary scale together with the usual pension arrangements.
Applications (three copies), including the names of three referees, must be submitted not later than Monday, 16 January, 1978, to the Registrar and Secretary, Old Shire Hall, Durham DH1 3HP, from whom further particulars may be obtained. (Candidates outside the British Isles may submit one copy only.)

EXETER
THE UNIVERSITY
ADMINISTRATIVE OFFICER

Applications are invited from graduates for a post of Administrative Officer in the office of the Deputy Registrar tenable from 1 February, 1978, or as soon as possible thereafter. The appointee will be required to assist the Deputy Registrar with the servicing of committees, the organisation of ceremonial and social events, and such other duties as may be required.
Appointment will be on Administrative Grade II (£5,425-£6,655 p.a.).
Applications (five copies) including the names of two referees should be sent to Miss Doreen Watson, Administrative Assistant (Appointments), University of Exeter, Northcote House, Exeter EX4 4QJ, from whom further particulars may be obtained, by 6 January, 1978, quoting reference No. 1/10/3165.

GWASG GREGYNOG

The University of Wales is setting up a limited company to continue the reestablishment of the fine printing tradition at Gregynog, its residential centre near Newtown in mid-Wales.
It is proposed to appoint a DIRECTOR/PRINTER, who will advise on the production of fine books which, with the assistance of a craftsman, he or she will print. Columbian and Albion hand-presses are in use.
The appointment will be pensionable; salary by discussion but not less than £6,000. A detached family house may be available for renting.
Applications, from candidates capable of the highest standards, should be submitted to the Registrar of the University of Wales by 17th December, 1977, and sent to the Warden, Gregynog, Newtown, Powys, SY16 3PW (tel. Tregynon (0686 87) 224) from whom further particulars may be obtained. Candidates are welcome to visit Gregynog, preferably by prior arrangement.

GLASGOW
THE UNIVERSITY
DEPARTMENT OF ZOOLOGY

Applications are invited for a post of temporary Lecturer in Zoology. The appointment is for two years only and will date from 1st April 1978, or as soon as possible thereafter.
Salary will be within the range £3,333 to £6,655 per annum of the Lecturers' scale. Appropriate superannuation scheme will apply.
Further information about the post can be obtained from the Secretary of the University Court, Room 18, The University of Glasgow, Glasgow G12 8QQ. The closing date for applications is 6th January 1978.
In reply please quote ref. no 4043T.

HONG KONG
THE UNIVERSITY
SENIOR LECTURESHIP/LECTURESHIP/ASSISTANT LECTURESHIP IN MANAGEMENT STUDIES

Additional posts in Management Studies are expected to be established in September 1978, and may be filled at Senior Lecturer, Lecturer or Assistant Lecturer level. Applicants should have an appropriate university degree, plus some teaching and/or professional experience. Applicants for a Senior Lectureship should additionally possess substantial teaching experience. Candidates with a general interest in Organizational Behaviour/Personnel Management will be especially welcome but candidates with interests in policy, managerial economics, or other management areas, may also wish to apply.
Annual salaries (superannuable) are: Senior Lecturer HK$123,200 x 3,900 to 125,960; Lecturer HK$[illegible] x 4,020 to 67,380 [illegible] x 4,020 to 79,410 x [illegible] to 90,240; Assistant Lecturer HK$43,260 x 4,020 to 55,320. (£1 = HK$8.50 approx.) Starting salary will depend on qualifications and experience. Income in Hong Kong is taxed at a maximum rate of 15 per cent.
Further particulars and application forms may be obtained from the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF, or the Assistant Secretary (Recruitment), University of Hong Kong, Hong Kong.
Closing date for applications is 31 January 1978.

LAMPETER
UNIVERSITY OF WALES
LECTURER IN SOCIAL STUDIES

Applications are invited for the new post of Lecturer in Social Studies. Duties to commence 1 October, 1978. Initial salary on or below the third point of the scale for University Lecturers plus U.S.S. benefits.
Further particulars from the Academic Registrar, Saint David's University College, Lampeter, Dyfed SA48 7ED, to whom applications should be returned by 9 January, 1978.

LAMPETER
UNIVERSITY OF WALES
LECTURER IN ECONOMICS

Applications are invited for the new post of Lecturer in Economics. Duties to commence 1st October, 1978. Initial salary on the scale for University Lecturers plus USS benefits.
Further particulars from the Academic Registrar, Saint David's University College, Lampeter, Dyfed SA48 7ED, to whom applications should be returned by 9th January, 1978.

LAMPETER
UNIVERSITY OF WALES
CHAIR OF HISTORY

Applications are invited for the Chair and Headship of the Department of History, which will become vacant on 1 October, 1978, on the retirement of Professor G. D. Chandaman. Initial salary will be within the professorial range plus F.S.S.U./U.S.S. benefits.
Further particulars may be obtained from the Academic Registrar, Saint David's University College, Lampeter, Dyfed, SA48 7ED, to whom applications (10 copies) should be returned by 9th January, 1978.

SOUTHAMPTON
THE UNIVERSITY
CHAIR OF APPLIED ECONOMICS

Applications are invited for appointment to the Chair of Applied Economics which will become vacant in September, 1978. Salary within the University's professorial range.
Further particulars may be obtained from the Academic Registrar, The University, Southampton SO9 5NH and applications (12 copies from applicants in the United Kingdom) must be submitted before January 27, 1978.

SOUTHAMPTON
THE UNIVERSITY
INSTITUTE OF SOUND AND VIBRATION RESEARCH

Applications are invited for the post of LECTURER in AUDIOLOGY in the Institute of Sound and Vibration Research. Candidates should have experience of teaching and research in Audiology.
Salary scale £3,333-£6,655 per annum. The initial salary will depend on qualifications and experience.
Further particulars may be obtained from D. A. S. Copland, The University, Southampton SO9 5NH, to whom applications (7 copies from United Kingdom applicants) should be sent not later than 6th January, quoting reference 336/A/THES.

Universities continued

HONG KONG
THE UNIVERSITY
LECTURESHIPS/ASSISTANT LECTURESHIPS IN POLITICAL SCIENCE

Applications are invited from candidates with qualifications in the field of public administration who are willing in time to develop a study of the application of the subject to Hong Kong. Some interest in administrative law, though not essential, would be welcomed.

The new lecturer would be required to spend the bulk of his time on the development of postgraduate work, particularly on the new M.Soc.Sc. in the field of public administration.

The department is also looking for a lecturer qualified in political behaviour, with special reference to East Asia. Applicants should state the other fields in which they can assist. This post would be designated for undergraduate courses. Preference would be given to candidates with experience of teaching political science to undergraduates for whom English is a second language.

Annual salaries (superannuable) are: Lecturer HK$[illegible] x 4,020 to 67,[illegible] (bar) 71,[illegible] x 4,020 to 7[illegible] x 4,0[illegible] to [illegible]; Assistant Lecturer HK$[illegible] x 4,020 to [illegible] (£1 equals HK$8.5) approximately). Starting salary will depend on qualifications and experience.

Further particulars and application forms may be obtained from the Association of Commonwealth Universities (Appts), 36 Gordon Square, London WC1H 0PF, or the Assistant Secretary (Recruitment), University of Hong Kong, Hong Kong.

Closing date for applications is January 16, 1978.

LONDON
THE UNIVERSITY
DEPARTMENT OF EXTRA-MURAL STUDIES
ADMINISTRATIVE OFFICER Grade IA

[illegible]

LONDON
THE UNIVERSITY
INSTITUTE OF LATIN AMERICAN STUDIES
ASSISTANT SECRETARY (ADMINISTRATIVE)

[illegible]

NEW ZEALAND
MASSEY UNIVERSITY
Palmerston North
RESEARCH FELLOWSHIP IN AGRICULTURAL MECHANISATION AND SAFETY

[illegible]

NORWICH
UNIVERSITY OF EAST ANGLIA
LECTURESHIP IN DEVELOPMENT STUDIES
(Applied Natural Sciences)

Applications are invited from candidates in the fields of water resources, agronomy or soil science, to expand an already well-established Natural Resource area in the School. The successful candidate will be expected to teach both theoretical and applied aspects of their subject at the undergraduate level and to contribute to the new M.A. in Rural Development. The teaching at present involves concepts of resource and the environment as well as more specialized theory and techniques courses. Appointment to this post in the School of Development Studies carries with it membership of the Overseas Development Group which usually involves up to one third of the faculty member's time being supported on outside finance, often overseas. Preference will be given to candidates with applied, practical, overseas experience in the context of rural development, and who can integrate both other areas of natural resources, and socio-economic factors in their teaching and research. It is hoped that the successful candidate could be in post by March/April, 1978. Initial salary within the range £[illegible] to £[illegible] on the scale £[illegible] to £[illegible] plus USS/USSU benefits.

Applications (one copy only) together with the names and addresses of three persons to whom reference may be made should be lodged with the Establishment Officer, University of East Anglia, Norwich NR4 7TJ, not later than 6 January, 1978. No forms of application are issued. In naming three referees you are particularly requested to give only the names of those who can immediately be approached.

THE OPEN UNIVERSITY
FACULTY OF EDUCATIONAL STUDIES
RESEARCH ASSISTANT

[illegible]

THE OPEN UNIVERSITY
FACULTY OF TECHNOLOGY
RESEARCH ASSISTANT IN DESIGN EDUCATION

[illegible]

SURREY
THE UNIVERSITY
HOME ECONOMICS DEPARTMENT
RESEARCH OFFICER

[illegible]

SHEFFIELD
THE UNIVERSITY
ATLAS LINGUARUM EUROPAE

[illegible]

SALFORD
THE UNIVERSITY

[illegible]

SOUTHAMPTON
THE UNIVERSITY
COMPUTER STUDIES GROUP
RELATIONAL DATA BASE SYSTEMS

[illegible]

U.S.A.
THE UNIVERSITY OF MINNESOTA
DEPARTMENT OF CLASSICS

[illegible]

WALES
THE UNIVERSITY
UNIVERSITY COLLEGE OF SWANSEA
LECTURER

[illegible]

WARWICK
THE UNIVERSITY
LECTURESHIP IN ECONOMICS

[illegible]

WARWICK
THE UNIVERSITY
PROFESSORSHIP IN ECONOMICS

[illegible]

WARWICK
THE UNIVERSITY
RESEARCH FELLOW IN PHYSICS

[illegible]

Polytechnics

SHEFFIELD CITY POLYTECHNIC
DEPARTMENT OF COMMUNICATION STUDIES

Senior Lecturer/ Lecturer II in Communications

(Mass Communication/Literature Studies)

Salary Scale: Senior Lecturer £5523-£6447 (bar)—£6909; Lecturer II £3744-£5985

Applications are invited for the above post. The Department is responsible for an Honours (CNAA) degree in Communication Studies and a wide range of courses in the Polytechnic as a whole

DEPARTMENT OF MANAGEMENT STUDIES

Research Assistant in Production Job Design

Salary Scale: £2861-£3039

The successful candidate will conduct an investigation into the management decision process regarding the Work Organisation or Production Mode decision. Applicants should hold a degree in Management, Business Studies, Engineering or the Behavioural Sciences. The research is of an interdisciplinary nature and the person appointed will be expected to register for the CNAA degree of M Phil/PhD

The post will be available for a period of three years.

Requests for an application form in writing only please, to the Personnel Department, Sheffield City Polytechnic [illegible]

HATFIELD
THE POLYTECHNIC
IN SERVICE TEACHER EDUCATION
LECTURER II

[illegible]

HATFIELD
THE POLYTECHNIC
SCHOOL OF ENGINEERING
PRINCIPAL LECTURER IN STRUCTURAL ANALYSIS

[illegible]

THE POLYTECHNIC HUDDERSFIELD

Audio Visual Advisor

LECTURER II OR SENIOR LECTURER

Ref. ACA/174

An educational technologist is required to act as Audio Visual Adviser to the Polytechnic and to take charge of the work of the Audio Visual Section.

Applicants should be graduates and preferably hold a qualification or have had experience in the field of audio visual provision for education. The successful applicant will also be concerned with the Staff Development Programme and supervise the work of a number of technicians and clerical staff.

SALARY: SL £5,523 to £6,447 (bar) to £6,909 per annum; LII £3,744 to £5,984 per annum, all inclusive of salary supplements.

PROJECT TASS: TEACHING AND THE SEVERELY SUBNORMAL

Ref. ACA/180

RESEARCH FELLOW OR RESEARCH ASSISTANT required for D.E.S. funded project on development and evaluation of self-instructional course teaching the severely subnormal, in association with the Hester Adrian Research Centre at the University of Manchester. Graduate qualifications in Psycchology or Education required, together with experience in one or more of: special education, computer analyses, VTR systems, behaviour modification.

Candidates for the post of Research Fellow should possess a Doctorate or similar research qualification.

SALARY: Research Fellow Burnham Scale (Lecturer II point 0) £3,744 per annum including salary supplements.

Research Assistant Burnham Scale (Lecturer I point 0), £2,[illegible] per annum including salary supplements.

Further details and application forms, which should be returned by December 20, 1977, from the Establishment Office, The Polytechnic, Queensgate, Huddersfield HD1 3DH (Telephone 0484 22288, ext. 2226).

Leeds POLYTECHNIC

HEAD OF SCHOOL OF MANAGEMENT AND BUSINESS STUDIES

A successor is required for the retiring Head of School. Applications are invited from well qualified, enterprising individuals with an appropriate record of achievement.

Salary scale - £8529 to £9093. Grade VI

Further particulars and application form from:

The Services Officer, (M13) Leeds Polytechnic, Calverley Street, Leeds LS1 3HE Tel: 0532 41101

Closing Date: 22 December 1977

The POLYTECHNIC WOLVERHAMPTON

Academic Registrar

(revised advertisement)

The grading of this post has now been improved resulting from the establishment of an additional Faculty of Education formed from three former colleges of education. Previous applicants do not need to reapply. Candidates should possess a university degree and/or relevant professional qualifications but above all have had significant senior experience of academic administration within higher education.

Revised salary scale Principal Officer (d-e) £6409 — £7594.

Details and application form from Establishment Officer, The Polytechnic, Wolverhampton WV1 1LY.

Polytechnics continued

ULSTER COLLEGE
THE NORTHERN IRELAND POLYTECHNIC
Faculty of Social and Health Sciences

LECTURER II OR SENIOR LECTURER IN PHYSIOTHERAPY

Applications are invited from experienced physiotherapists for the above post. Successful applicants will be expected to teach on both the new degree and the established diploma courses. They should be prepared to contribute to course development and research programmes into the validity of therapy.

In addition to holding the appropriate professional qualifications, applicants must present evidence of post-qualification study or be involved in research or development in a specialised area.

Salary Scales:

SENIOR LECTURER	£5,523—£6,447/£6,909
LECTURER II	£3,744—£5,985

The Polytechnic is a direct grant institution with an independent Board of Governors. It opened in 1971 and now has a student population of some 6,100. It has extensive new purpose built accommodation including 750 residential places on the 114 acre campus overlooking the sea at Jordanstown, a pleasant and quiet residential area. There is a scheme of assistance with removal.

Further particulars and application forms which must be returned by January 16, 1978, may be obtained by telephoning Whiteabbey (0231) 65131 ext 2243 or by writing to:

The Establishment Officer,
Ulster College, The Northern Ireland Polytechnic,
Shore Road, Newtownabbey, Co. Antrim BT37 0QB

Research Officer
£4,161-£4,507 p.a. Bounds Green

A responsible and varied post for a graduate with experience of administration. You would provide a comprehensive service of research administration involving the procedures connected with research degrees, co-ordinating research grant applications, dealing with centralised administration concerning fellowships and awards and providing an information service on research activity within the Polytechnic. You would also be expected to give secretarial assistance to several committees, and to provide assistance with planning and development activities.

We are looking for a graduate whose experience of administration includes committee work, preferably within an academic environment.

Please write for full details and an application form, posting first class, to: Appointments Officer (Ref. 74.2.1B), Middlesex Polytechnic, Bounds Green Road, N11 2NQ, to whom completed forms must be returned by December 19.

Middlesex Polytechnic

Hall Manager
(Residential)
AP4: £4,161-£4,507 pa inc.

Middlesex Polytechnic's new hall of residence at Wood Green, North London, will be open to student residents from early 1978. It is a mixed hall with approximately 170 places, predominantly single study bedrooms.

The Hall Manager will be responsible for the overall administration of the hall, and direction of hall staff. Furnished and centrally heated accommodation is provided, comprising two bedrooms, lounge/diner, kitchen, bathroom and toilet

Please write for full details and application form, posting first class to: Appointments Office (Ref. 56.4H), Middlesex Polytechnic, Bounds Green Road N11 2NQ. Closing date December 19.

Middlesex Polytechnic

NORTH LONDON
THE POLYTECHNIC
DEPARTMENT OF CHEMISTRY
RESEARCH APPOINTMENTS

A number of research appointments are available [illegible]

TEESSIDE
THE POLYTECHNIC
MANAGEMENT DEPARTMENT
NORTHERN REGIONAL MANAGEMENT CENTRE
RESEARCH OFFICER AND ASSISTANT RESEARCH OFFICER

[illegible]

Colleges and Departments of Art

LONDON
INNER LONDON EDUCATION AUTHORITY
CENTRAL SCHOOL OF ART AND DESIGN
Southampton Row London WC1B 4AP
FINE ART DEPARTMENT
PRINCIPAL LECTURER IN SCULPTURE

[illegible]

Fellowships and Studentships

RESEARCH STUDENTSHIPS
THE DEPARTMENT OF NUCLEAR SCIENCE AND TECHNOLOGY
ROYAL NAVAL COLLEGE
GREENWICH, LONDON SE10 9NN

Applications are invited for a research studentship to study for the degree of MPhil (CNAA) or PhD (CNAA) at the Royal Naval College. The research field is the measurement of neutron damage fluences in reactor materials, using activation techniques.

Applicants should either hold, or expect to receive, a First or Upper Second Class Honours Degree in a relevant field. Appointment will be for a period of three years. The remuneration will be equivalent to that of a S.R.C. postgraduate studentship (London).

Requests for further details and an application form should be made to the Secretary Royal Naval College, Greenwich, London SE10 9NN, before 1st January, 1978.

READING
THE UNIVERSITY
UNIVERSITY POSTGRADUATE STUDENTSHIPS

Applications are invited for University Postgraduate Studentships from persons who hold a first degree or who will have completed a first degree course by July, 1978. Awards may also be made to the Huntley and Palmers Agricultural Research Studentship, the Herbert Knapman Postgraduate Studentship in Science and the Paul White Studentships in Mathematics.

Studentships are tenable for a maximum period of three years from October 1, 1978, subject to annual renewal, and will be of the value of £1,475 per annum, together with payment of Composition and Students' Union Fees.

Further particulars and application form may be obtained from the Senior Assistant Registrar, Room 222, Whiteknights House, University of Reading, Whiteknights, Reading RG6 2AH, by whom applications must be received not later than February 1, 1978.

NOTTINGHAM
THE UNIVERSITY
DEPARTMENT OF PHYSIOLOGY AND ENVIRONMENTAL STUDIES
PHOTOCONTROL OF ENZYME AND MESSENGER RNA SYNTHESIS

Applications are invited for a postdoctoral fellowship to lead an investigation into the photocontrol of transcription and enzyme synthesis using in vitro protein synthesis and immunochemical techniques. The post is available for 3 years and the work will be supported by a graduate research assistant and a research technician. Applicants should have a Ph.D. (or its equivalent) in a biochemical field; candidates with experience in the use of specific antibodies would be particularly welcome.

Commencing salary within range £3,333 to £3,761. Applications with a curriculum vitae and the names of two referees should be sent to Mr. A. Whiting, University of Nottingham, School of Agriculture, Sutton Bonington, Loughborough, Leics. LE12 5RD as soon as possible.

Special Appointments

MINISTRY OF DEFENCE
Burnham Language Lecturer Grade 1 (Polish)

at RAF North Luffenham, Oakham, Leicestershire

Applications are invited from suitably qualified teachers to fill this post in April, 1978.

DUTIES To teach Polish to RAF Colloquial and Civil Service Commission Interpreter levels. Ability to teach military/technical Polish especially with regard to RAF terminology.

QUALIFICATIONS Preferably a native speaker but consideration given to candidates holding a Degree in Slavonic and Eastern European Languages and a teaching qualification.

SALARY will be in accordance with the Scales for Teachers' in Establishments for Further Education, England & Wales, i.e. £2469-£4377 according to qualifications and experience, plus Supplements. A pensionable allowance of £582 p.a. will be paid for the slightly longer teaching year.

SUPERANNUATION The appointment will be superannuated under the Teachers' Superannuation Act and the successful candidate will be granted established civil servant status.

Application forms are obtainable from the Ministry of Defence, CM(S)4(L), Room 339 Lacon House, Theobalds Road, London, WC1X 8RY, quoting reference AW/1450 and completed forms should be returned no later than 2 January, 1978.

Colleges of Further Education

LOOKING FOR A JOB IN LIVERPOOL?

The National Association of Teachers in Further and Higher Education is in dispute with the Liverpool Education Authority over conditions of service in further education establishments.

NATFHE members considering taking an FE job in Liverpool are strongly advised to contact NATFHE first. Write to Negotiating Secretary, NATFHE, Hamilton House, Mabledon Place, London WC1H 9BH.

PRINCIPAL DESIGNATE (Group 6)
[illegible]

[illegible]

The [illegible] should have sufficient experience in higher and further education to meet the challenges and demands of setting up a new College. The post requires [illegible] managerial experience and [illegible] Principal should be capable of developing initiatives within the field of Higher Education and have an outstanding career record.

It is hoped that the new Principal will be in post as soon as possible and be available to participate in the planning [illegible].

Further details and application forms can be obtained from the Chief Further Education Officer, Provincial House, Tyrell Street, Bradford BD1 1NP.

Applications should be returned to the above not later than 31st December, 1977.

City of Bradford Metropolitan Council

WEST GLAMORGAN County Council

Applications are invited from suitably qualified persons for the following post in the Authority's Further Education Service.

Swansea College of Further Education

HEAD OF DEPARTMENT OF SCIENCE AND MATHEMATICS (Grade 3)

Applicants should be graduates or equivalent with appropriate industrial, teaching and administrative experience.

Salary: £6,231 to £7,023 plus Supplements.

Application forms and further particulars are available from the undersigned, on receipt of a stamped, addressed, foolscap envelope, quoting post reference 1FSC/12.25.77.

CLOSING DATE: Closing date for the receipt of completed application forms is Thursday, December 22, 1977.

John Beale, Director of Education, Education Department, Princess House, Princess Way, SWANSEA.

Courses

BRADFORD COLLEGE
Diploma course in Early Childhood Education

Applications are now invited from qualified teachers with at least 5 years teaching experience, for this one year full-time in-service course commencing September, 1978.

Closing date is January 31, 1978.
For further details write immediately to:

The Admissions Officer,
Bradford College, Great Horton Road,
Bradford BD7 1AY
Telephone (0274) 34844

DIPLOMA OF ENGLISH STUDIES

Foreign students who passed the examination for the Certificate of Proficiency in December 1976 or earlier are eligible to take the June 1978 examination for the Diploma of English Studies conducted by the University of Cambridge Local Examinations Syndicate. The Diploma course involves study of Language and Literature to a level within the scope of the first part of a British university degree course in a second language.

Brookside College, Cambridge, is holding courses commencing in January, 1978, leading to the Diploma examination.

Apply to: The Vice-Principal, Brookside College, 3 Brookside, Cambridge.

SUMMER TEACHING?
BROOKSIDE COLLEGE
Cambridge

Will be holding a four-week course in the Teaching of English as a Foreign Language, commencing on 9th January, 1978. Certificate in T.E.F.L. for successful students.

Apply to: The Vice-Principal, 3 Brookside, Cambridge. Tel. Cambridge 64639.

Classified Advertisements
To advertise in the THES phone John Ladbrook 01-837 1234
THE TIMES Higher Education SUPPLEMENT
New Printing House Square, P.O. Box 7, Gray's Inn Road, London WC1X 8EZ

Universities continued

HONG KONG

THE UNIVERSITY

LECTURESHIPS/ASSISTANT LECTURESHIPS IN POLITICAL SCIENCE

Applications are invited from candidates with qualifications in the field of public administration who are willing in time to develop a study of the application of the subject to Hong Kong. Some interest in administrative law, though not essential, would be welcomed.

The new lecturer would be required to spend the bulk of his time on the development of postgraduate work, particularly on the new M.Soc.Sc. in the field of public administration.

The department is also looking for a lecturer qualified in political behaviour, with special reference to East Asia. Applicants should state the other fields in which they can assist. This post would be designated for undergraduate courses. Preference would be given to candidates with experience of teaching political science to undergraduates for whom English is a second language.

Annual salaries (superannuable) are: Lecturer HK$51,510 x 4,020 to 67,380 (bar) 71,400 x 4,020 to 79,440 x 4,980 to 89,210; Assistant Lecturer HK$43,360 x 4,020 to 55,320 (£1 equals HK$8.30 approximately). Starting salary will depend on qualifications and experience.

Further particulars and application forms may be obtained from the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF, or the Assistant Secretary (Recruitment), University of Hong Kong, Hong Kong.

Closing date for applications is January 15, 1978.

LONDON

THE UNIVERSITY

DEPARTMENT OF EXTRA-MURAL STUDIES

ADMINISTRATIVE OFFICER Grade IA

Applications are invited from graduates for a post in the Extension Section of the Extra-Mural Department concerned with administration of a wide range of courses in the social sciences, including Diplomas in Sociology and Psychology and Certificate and Diploma in Criminology. The appointment involves organizing, supervisory and committee duties, together with an opportunity for teaching. Previous teaching and/or administrative experience, especially in adult education, essential.

Initial salary, according to qualifications and experience, within Grade IA of the National Salary Structure for University Administrative Officers £2,627 to £3,627, plus £450 London Allowance; University Superannuation Scheme, six weeks' leave per annum.

Application form and further particulars from Mrs. Cousins, Personnel Section, University of London, Senate House, Malet Street, London WC1E 7HU (telephone 01-636 8000, extension 15). Closing date for the receipt of applications is 16th January, 1978.

LONDON

THE UNIVERSITY

INSTITUTE OF LATIN AMERICAN STUDIES

ASSISTANT SECRETARY (ADMINISTRATIVE)

Applications are invited for the post of Assistant Secretary (Administrative). Candidates should possess a degree, have appropriate experience of academic administration and, while not essential, a knowledge of Spanish would be an added recommendation. Duties to assist Secretary in work of Institute. Salary on Grade 1A of National Scale for Administrative Staff plus £450 London Allowance, USS provision, six weeks' leave.

Applications, which should include names and addresses of three referees, to Secretary, Institute of Latin American Studies, 31 Tavistock Square, London WC1H 9HA, not later than 31st December, 1977.

NEW ZEALAND

MASSEY UNIVERSITY
Palmerston North

RESEARCH FELLOWSHIP IN AGRICULTURAL MECHANIZATION AND SAFETY

Applications are invited for a three year terminating Research Fellowship beginning early in 1978, which is sponsored by the Accident Compensation Commission. The successful candidate will be required to undertake research into aspects of the guarding of agricultural machines, tractor traction and stability and the handling of agricultural chemicals. A proportion of the time will be spent on survey work and applicants should therefore be willing to spend some time away from home. Opportunity will exist for original design work in guarding and chemical handling devices. Testing and evaluation of machine guards, traction, tractor stability and chemical protective clothing will also be required. Finance for equipment and some technical assistance will be available.

The projects will be undertaken within the agricultural and horticultural mechanization section of the Agronomy Department at Massey University, but cooperation with other University departments and outside organisation will be encouraged where applicable.

Candidates should hold a degree in agricultural mechanization, agricultural science or agricultural engineering with specialisation in field machinery, and should have had practical farming experience. Preference will be given to candidates with postgraduate qualifications.

Salary range: NZ$6,000 to $7,500 p.a.

Further details of the position together with the Conditions of Appointment may be obtained from the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF, or the Registrar of the University. Applications close 20 January, 1978.

NORWICH

UNIVERSITY OF EAST ANGLIA

LECTURESHIP IN DEVELOPMENT STUDIES (Applied Natural Sciences)

Applications are invited from candidates in the fields of water resources, agronomy or soil science, to expand an already well-established Natural Resources area in the School. The successful candidate will be expected to teach both theoretical and applied aspects of their subject at the undergraduate level and to contribute to the new M.A. in Rural Development. The teaching at present involves concepts of resource and the environment as well as more specialised theory and techniques courses. Appointment to this post in the School of Development Studies carries with it membership of the Overseas Development Group which usually involves up to one third of the faculty member's time being supported on outside finance, often overseas. Preference will be given to candidates with applied, practical, overseas experience in the context of rural development, and who can integrate both other areas of natural resources and socio-economic factors in their teaching and research. It is hoped that the successful candidate could be in post by March-April, 1978. Initial salary within the range £3,333 to £[illegible] on the scale £3,333 to £6,655 plus USS/USSU benefits.

Applications (one copy only) together with the names and addresses of three persons to whom reference may be made should be lodged with the Establishment Officer, University of East Anglia, Norwich NR4 7TJ, not later than 6 January, 1978. No forms of application are issued. In naming three referees you are particularly requested to give only the names of those who can immediately be approached.

THE OPEN UNIVERSITY

FACULTY OF EDUCATIONAL STUDIES

RESEARCH ASSISTANT

Applications are invited for the post of research assistant to work on one of the following projects with the Sociology of Education Discipline Group:

(i) ETHNOGRAPHY and LEARNING.

(ii) INFORMATION RESEARCH.

(iii) EDUCATION AND INTERNATIONAL DEVELOPMENT.

(iv) PUPILS' SOCIAL WORLDS.

(v) INDUSTRY, EDUCATION and SOCIAL POLICY.

Study will be on the scale £2,401-£3,100 p.a. (under review with effect from 1st October, 1977) plus USS benefits.

Application forms and further particulars are available, by postcard request please, from the Personnel Manager (D.S 2), The Open University, P.O. Box 75, Walton Hall, Milton Keynes, MK7 6AL, or by telephone from Milton Keynes 63868. Closing date for applications: 3 January, 1978.

THE OPEN UNIVERSITY

FACULTY OF TECHNOLOGY

RESEARCH ASSISTANT IN DESIGN EDUCATION

Applications are invited for a post of Research Assistant in the Design discipline to work in the field of design education. The work will be concerned with a wide spectrum of educational levels (e.g. both school and university) and design purposes (e.g. both professional and non-professional). Candidates would be expected to have a first degree or equivalent qualifications. Since the research bridges both education and design, candidates will be preferred who have relevant interdisciplinary interests, qualifications or experience.

The appointment is for three years commencing as soon as possible. Salary will be on the scale £2,401 to £3,100 per annum (under review with effect from October 1, 1977), plus U.S.S. benefits.

Application forms and further particulars are available, by postcard request, please, from the Personnel Manager (DE3), The Open University, P.O. Box 75, Walton Hall, Milton Keynes, MK7 6AL, or by telephone from Milton Keynes 63868. Closing date for applications: January 8, 1978.

SURREY

THE UNIVERSITY

HOME ECONOMICS DEPARTMENT

RESEARCH OFFICER

A vacancy has occurred for a Research Officer in the research programme on lighting practice in the home carried out under the direction of Dr. Arthur Tarrant, FIllumES (Instl). A graduate is required to carry out lighting measurements in a large number of individual homes, and the person appointed must be capable of successfully interviewing householders. The post is financed by the SRC and the SSRC and is of three years' duration. The person appointed (male or female) would be expected to proceed to the degree of PhD.

The salary will be on the Research Officer 1B Scale, commencing at £3,504 per annum.

Further particulars of this post may be obtained from the Assistant Secretary (Personnel), University of Surrey, Guildford GU2 5XH, or telephone Guildford 71281, ext. 452 and to whom applications in the form of a curriculum vitae, including the names and addresses of two referees, should be submitted by 3rd January, 1978.

SHEFFIELD

THE UNIVERSITY

ATLAS LINGUARUM EUROPAE

Requires fieldworkers with knowledge of phonetics.

Apply Director, Centre for English Cultural Tradition and Language, The University, Sheffield S10 2TN.

SALFORD

THE UNIVERSITY

CHAIR IN CONTEMPORARY HISTORY AND POLITICS

Applications are invited for a new Chair in the Department of Sociological and Political Sciences. Current activities include research in Urban Politics and Politics, History of Ideas, European History and Politics and the History and Politics of Industrial Society (in which subjects a BA Honours degree is offered).

Applicants with interests in these areas, or in other areas of contemporary history, would be particularly welcome.

Salary will be within the professorial range, the minimum of which is £8,106 per annum (under review).

Applications should be received by the Registrar, University of Salford, Salford M5 4WT (from whom further particulars may be obtained) by 16 January, 1978. Please quote reference number SG/27/71 THES.

SOUTHAMPTON

THE UNIVERSITY

COMPUTER STUDIES GROUP RELATIONAL DATA BASE SYSTEMS

RDBMS is a relational database system developed jointly by ICL, the IBM and Southampton University. A prototype system has been operational for some time.

An opportunity exists to join the team carrying out further development and evaluation of the system. The appointment will be for one year from a date to be arranged. Salary on the scale £3,333 to £3,761 per annum, depending on age and experience.

Applicants should have experience of programming in a high level language, but previous experience of database work is not necessary. Although the person appointed will be employed by the University, he/she will become a member of the joint development team which is based in West London.

Further particulars can be obtained from D. A. R. Copland, The University, Southampton SO9 5NH to whom applications giving a curriculum vitae and the names of two referees should be sent as soon as possible, quoting reference 520 A THES.

U.S.A.

THE UNIVERSITY OF MINNESOTA

DEPARTMENT OF CLASSICS

Invite applications for September, 1978, for an ASSISTANT PROFESSORSHIP in LATIN LITERATURE. Applications accepted until January 10th, 1978.

Send vitae and letters of recommendation to Professor R. P. Sonkowsky, Chairman, Department of Classics, University of Minnesota, MPLS MN 55455 U.S.A. Enquiries Professor A. T. Kraabel, Oxford (0865) 54826 evenings.

WALES

THE UNIVERSITY

UNIVERSITY COLLEGE OF SWANSEA

LECTURER

Applications are invited for the vacancy of LECTURER in MODERN ECONOMIC HISTORY in the Department of [illegible]. The successful candidate will also do [illegible] in the Centre of Russian and East European Studies.

The appointment, which will date from March 1, 1978, will be at the lower end of the scale £3,333 to £6,655 per annum, together with USS/[illegible]. Closing date Wednesday, January 18, 1978.

LECTURER

Applications are invited for the vacancy of LECTURER in the MANAGEMENT of SOCIAL SERVICES in the Centre for Development Studies to work with an interdisciplinary team engaged in postgraduate teaching and research on social policy, management planning and administration of social services in developing countries.

The appointment will be on the scale £3,333 to £6,655 per annum, together with USS/USDPS benefits. Closing date Wednesday, December 21, 1977.

Further particulars and application forms (two copies) for the above positions may be obtained from the Personnel Officer, University College of Swansea, Singleton Park, Swansea, SA2 8PP, to whom they should be returned by the above closing dates.

WARWICK

THE UNIVERSITY

LECTURESHIP IN ECONOMICS

Applications are invited for a Lectureship in the Department of Economics, specialising in the field of Econometrics or Economic History. The appointment will be tenable from a date to be arranged.

Initial salary within the first four points on the Lecturer scale: £3,333 to £3,775 to £6,655 per annum (under review).

Further particulars and application forms from the Academic Registrar, University of Warwick, Coventry CV4 7AL, quoting Ref. No.: 17/2R/77. Closing date for receipt of applications is 6th January, 1978.

WARWICK

THE UNIVERSITY

PROFESSORSHIP IN ECONOMICS

Applications are invited for a Professorship in the Department of Economics, specialising in the field of [illegible] International Economics. The appointment will be tenable from a date to be arranged.

Salary in the Professorial range (minimum £8,106 p.a. under review).

Further details may be obtained from the Academic Registrar, University of Warwick, Coventry CV4 7AL, quoting Ref. No.: 17/2H/77. Closing date for receipt of applications January 6, 1978.

WARWICK

THE UNIVERSITY

RESEARCH FELLOW IN PHYSICS

Applications are invited for a Post-doctoral Research Fellowship tenable in the Department of Physics from 1st April 1978, for two years in the first instance. The research programme involves experimental and theoretical studies of glass structures using X-ray absorption spectroscopy (EXAFS). Much of the experimental work will be carried out at DESY, Hamburg. Applicants should have a keen interest in solid state physics and experience of computing techniques.

Initial salary up to £3,761 per annum on the Range IA scale: £3,333-£5,627 per annum (under review). Further information may be obtained from Professor P. N. Butcher, Department of Physics.

Application forms from the Academic Registrar, University of Warwick, Coventry CV4 7AL, quoting Ref. No. 17/R/77. Completed applications should be returned as soon as possible.

Polytechnics

SHEFFIELD CITY POLYTECHNIC

DEPARTMENT OF COMMUNICATION STUDIES

Senior Lecturer/ Lecturer II in Communications

(Mass Communication/Literature Studies)

Salary Scale: Senior Lecturer £5523-£6447 (bar)—£6909; Lecturer II £3744-£5985.

Applications are invited for the above post. The Department is responsible for an Honours (CNAA) degree in Communication Studies and a wide range of courses in the Polytechnic as a whole.

DEPARTMENT OF MANAGEMENT STUDIES

Research Assistant in Production Job Design

Salary Scale: £2661-£3039.

The successful candidate will conduct an investigation into the management decision process regarding the Work Organisation or Production Mode decision. Applicants should hold a degree in Management, Business Studies, Engineering or the Behavioural Sciences. The research is of an interdisciplinary nature and the person appointed will be expected to register for the CNAA degree of M.Phil/PhD.

The post will be available for a period of three years.

Requests for an application form in writing only please, to the Personnel Department, Sheffield City Polytechnic (Dept. THES), Halfords House, Fitzalan Square, Sheffield S1 2BB, to whom completed forms should be returned by December 23rd, 1977

HATFIELD

THE POLYTECHNIC

IN SERVICE TEACHER EDUCATION

LECTURER II

To contribute from Easter 1978 or earlier to various in-service courses including a BEd degree and postgraduate diplomas.

Applicants, who should have good teaching experience, should be well-qualified in Education and the Sociology of Education.

Salary scale LII £3,804 to £5,673 (bar)—£6,597 per annum inclusive.

Application forms obtainable from the Staffing Officer, The Hatfield Polytechnic, P.O. Box 109, Hatfield, Hertfordshire or telephone Hatfield 68100 extension 309.

Please quote reference 986. Closing date: 3rd January.

HATFIELD

THE POLYTECHNIC

SCHOOL OF ENGINEERING

PRINCIPAL LECTURER in STRUCTURAL ANALYSIS Ref. 961

The successful applicant will be expected to teach Structural Analysis including theoretical aspects of reinforced, prestressed concrete and structural steel up to post-graduate level, and to develop and take part in research in his/her field of interest.

Salary scale, £6,582 to £7,284 (bar) to £8,520 p.a. inclusive.

LECTURER/SENIOR LECTURER in SOIL MECHANICS and STRUCTURAL ENGINEERING Ref. 962

The successful applicant will be expected to have a main interest either in Soil Mechanics or in Structural Engineering. The person would be required to teach in one of the areas up to post-graduate level and up to undergraduate level in the other area of interest. The person would be expected to develop and take part in research in his/her main area of interest.

Salary scale, Lecturer, £3,804 to £5,673 (bar) to £6,597 inclusive. Senior Lecturer, £5,673 to £6,597 (bar) to £7,059 inclusive.

Application forms and further details are obtainable from the Staffing Office, The Hatfield Polytechnic, P.O. Box 109, Hatfield, Hertfordshire, or telephone Hatfield 68100 extension 109.

Please quote reference numbers.

Closing date January 3.

Polytechnics

THE POLYTECHNIC HUDDERSFIELD

Audio Visual Adviser

LECTURER II OR SENIOR LECTURER
Ref. ACA/174

An educational technologist is required to act as Audio Visual Adviser to the Polytechnic and to take charge of the work of the Audio Visual Section.

Applicants should be graduates and preferably hold a qualification or have had experience in the field of audio visual provision for education. The successful applicant will also be concerned with the Staff Development Programme and supervise the work of a number of technicians and clerical staff.

SALARY: SL £5,523 to £6,447 (bar) to £6,909 per annum. LII £3,744 to £5,984 per annum, all inclusive of salary supplements.

PROJECT TASS: TEACHING AND THE SEVERELY SUBNORMAL
Ref. ACA/180

RESEARCH FELLOW OR RESEARCH ASSISTANT required for D.E.S. funded project on development and evaluation of self-instructional course teaching the severely subnormal, in association with the Hester Adrian Research Centre at the University of Manchester. Graduate qualifications in Psycchology or Education required, together with experience in one or more of: special education, computer analyses, VTR systems, behaviour modification.

Candidates for the post of Research Fellow should possess a Doctorate or similar research qualification.

SALARY: Research Fellow Burnham Scale (Lecturer II point 0), £3,744 per annum including salary supplements.

Research Assistant Burnham Scale (Lecturer I point 0), £2,913 per annum including salary supplements.

Further details and application forms, which should be returned by December 20, 1977, from the Establishment Office, The Polytechnic, Queensgate, Huddersfield HD1 3DH (Telephone 0484 22288, ext. 2226).

Leeds POLYTECHNIC

HEAD OF SCHOOL OF MANAGEMENT AND BUSINESS STUDIES

A successor is required for the retiring Head of School. Applications are invited from well qualified, enterprising individuals with an appropriate record of achievement.

Salary scale - £8529 to £9093. Grade VI

Further particulars and application form from:

The Services Officer, (M13)
Leeds Polytechnic,
Calverley Street, Leeds LS1 3HE
Tel: 0532 41101

Closing Date: 22 December 1977

The POLYTECHNIC WOLVERHAMPTON

Academic Registrar

(revised advertisement)

The grading of this post has now been improved resulting from the establishment of an additional Faculty of Education formed from three former colleges of education. Previous applicants do not need to reapply. Candidates should possess a university degree and/or relevant professional qualifications but above all have had significant senior experience of academic administration within higher education.

Revised salary scale Principal Officer (d-e) £6409 – £7584.

Details and application form from Establishment Officer, The Polytechnic, Wolverhampton WV1 1LY.

Polytechnics continued

ULSTER COLLEGE THE NORTHERN IRELAND POLYTECHNIC

Faculty of Social and Health Sciences

LECTURER II OR SENIOR LECTURER IN PHYSIOTHERAPY

Applications are invited from experienced physiotherapists for the above post. Successful applicants will be expected to teach on both the new degree and the established diploma courses. They should be prepared to contribute to course development and research programmes into the validity of therapy.

In addition to holding the appropriate professional qualifications, applicants must present evidence of post-qualification study or be involved in research or development in a specialised area.

Salary Scales:

SENIOR LECTURER	£5,523—£6,447/£6,909
LECTURER II	£3,744—£5,985

The Polytechnic is a direct grant institution with an independent Board of Governors. It opened in 1971 and now has a student population of some 6,100. It has extensive new purpose built accommodation including 750 residential places on the 114 acre campus overlooking the sea at Jordanstown, a pleasant and quiet residential area. There is a scheme of assistance with removal.

Further particulars and application forms which must be returned by January 16, 1978, may be obtained by telephoning Whiteabbey (0231) 65131 ext 2243 or by writing to:

The Establishment Officer,
Ulster College, The Northern Ireland Polytechnic,
Shore Road, Newtownabbey, Co. Antrim BT37 0QB

Research Officer

£4,161-£4,507 p.a. Bounds Green

A responsible and varied post for a graduate with experience of administration. You would provide a comprehensive service of research administration involving the procedures connected with research degrees, co-ordinating research grant applications, dealing with centralised administration concerning fellowships and awards and providing an information service on research activity within the Polytechnic. You would also be expected to give secretarial assistance to several committees, and to provide assistance with planning and development activities.

We are looking for a graduate whose experience of administration includes committee work, preferably within an academic environment.

Please write for full details and an application form, posting first class, to: Appointments Officer (Ref. 74.2.1B), Middlesex Polytechnic, Bounds Green Road, N11 2NQ, to whom completed forms must be returned by December 19.

Middlesex Polytechnic

Hall Manager

(Residential)
AP4: £4,161-£4,507 pa inc.

Middlesex Polytechnic's new hall of residence at Wood Green, North London, will be open to student residents from early 1978. It is a mixed hall with approximately 170 places, predominantly single study bedrooms.

The Hall Manager will be responsible for the overall administration of the hall, and direction of hall staff. Furnished and centrally heated accommodation is provided, comprising two bedrooms, lounge/diner, kitchen, bathroom and toilet.

Please write for full details and application form, posting first class to: Appointments Office (Ref. 58 4H), Middlesex Polytechnic, Bounds Green Road N11 2NQ. Closing date December 19.

Middlesex Polytechnic

TEESSIDE

THE POLYTECHNIC

MANAGEMENT DEPARTMENT

NORTHERN REGIONAL MANAGEMENT CENTRE

RESEARCH OFFICER AND ASSISTANT RESEARCH OFFICER

Required to undertake a significant action research programme investigation, initially in the Tees area, aspects of the entrepreneurial and growth processes of businesses indigenous to the area, with particular reference to the effects of management education and of various environmental influences.

Applicants, who may have come from a variety of disciplinary backgrounds, should already have comprehensive research experience, according to the post applied for, preferably associated with small manufacturing and service businesses or with management education.

The appointment will be for a specific period of two years, commencing early 1978 with salaries and increments paid in line with the Burnham Scale.

Research Officer: SL Grade, Starting salary between £5,523 and £5,985.

Assistant Research Officer: LI Grade, Starting salary between £3,039 and £3,891.

Application forms (returnable in two weeks) and further particulars are available from the Staffing Section, Teesside Polytechnic, Borough Road, Middlesbrough, Cleveland TS1 3BA.

NORTH LONDON

THE POLYTECHNIC

DEPARTMENT OF CHEMISTRY

RESEARCH APPOINTMENTS

A number of research appointments are available immediately for research projects in one or more of the following areas of chemistry:

Organic synthesis and organic reaction mechanisms;

Coordination chemistry, alkali metal antibiotics and ionophores, metal binding in transferring;

X-ray crystal analysis, nmr and mass spectroscopy;

Cement chemistry;

Pollution chemistry;

Computer-assisted learning, laboratory work in chemical education.

The appointments will be for one, two or possibly three years as Research Assistant (requiring a good honours United Kingdom degree or equivalent), or Research Fellow (for post-doctoral workers).

Salary Scales (inclusive of London Allowance):

Research Fellows: £3,023 to £4,239.

Research Assistants: £2,778 to £2,940.

Applications should be sent at once, enclosing curriculum vitae and the names of two academic or industrial referees, to The Head of the Department of Chemistry, The Polytechnic of North London, Holloway Road, N7 8DB, from whom further information on the terms of service may be obtained.

Closing date: 3rd January, 1977.

Colleges and Departments of Art

LONDON

INNER LONDON EDUCATION AUTHORITY

CENTRAL SCHOOL OF ART AND DESIGN
Southampton Row London WC1B 4AP

FINE ART DEPARTMENT
PRINCIPAL LECTURER in SCULPTURE.

Applications are invited from practising artists for the post of Principal Lecturer (with special responsibility for CNAA BA Studies).

Salary Scale: (In accordance with the Burnham F.E Report) £6,940-£6,642 (bar) £7,378 plus £402 Supplement and £402 Inner London Allowance.

Further details and application forms obtainable from The Registrar and returnable within fourteen days of the appearance of this advertisement.

Fellowships and Studentships

RESEARCH STUDENTSHIPS

THE DEPARTMENT OF NUCLEAR SCIENCE AND TECHNOLOGY

ROYAL NAVAL COLLEGE
GREENWICH, LONDON SE10 9NN

Applications are invited for a research studentship to study for the degree of MPhil (CNAA) or PhD (CNAA) at the Royal Naval College. The research field is the measurement of neutron damage fluences in reactor materials, using activation techniques.

Applicants should either hold, or expect to receive, a First or Upper Second Class Honours Degree in a relevant field. Appointment will be for a period of three years. The remuneration will be equivalent to that of a S.R.C. postgraduate studentship (London).

Requests for further details and an application form should be made to the Secretary Royal Naval College, Greenwich, London SE10 9NN, before 1st January, 1978.

READING

THE UNIVERSITY

UNIVERSITY POSTGRADUATE STUDENTSHIPS

Applications are invited for University Postgraduate Studentships from persons who hold a first degree or who will have completed a first degree course by July, 1978. Awards may also be made to the Huntley and Palmers Agricultural Research Studentship, the Herbert Knapman Postgraduate Studentship in Science and the Paul White Studentships in Mathematics.

Studentships are tenable for a maximum period of three years from October 1, 1978, subject to annual renewal, and will be of the value of £1,475 per annum, together with payment of Composition and Students' Union Fees.

Further particulars and application form may be obtained from the Senior Assistant Registrar, Room 225, Whiteknights House, University of Reading, Whiteknights, Reading RG6 2AH, by whom applications must be received not later than February 1, 1978.

NOTTINGHAM

THE UNIVERSITY

DEPARTMENT OF PHYSIOLOGY AND ENVIRONMENTAL STUDIES

PHOTOCONTROL OF ENZYME AND MESSENGER RNA SYNTHESIS

Applications are invited for a postdoctoral fellowship to lead an investigation into the photocontrol of transcription and enzyme synthesis using in vitro protein synthesis and immunochemical techniques. The post is available for 3 years and the work will be supported by a graduate research assistant and a research technician. Applicants should have a Ph.D. (or its equivalent) in a biochemical field; candidates with experience in the use of specific antibodies would be particularly welcome.

Commencing salary within range £3,333 to £3,761. Applications with a curriculum vitae and the names of two referees should be sent to Mr. A. Whiting, University of Nottingham, School of Agriculture, Sutton Bonington, Loughborough, Leics. LE12 5RD as soon as possible.

Special Appointments

MINISTRY OF DEFENCE

Burnham Language Lecturer Grade 1 (Polish)

at RAF North Luffenham, Oakham, Leicestershire

Applications are invited from suitably qualified teachers to fill this post in April, 1978.

DUTIES To teach Polish to RAF Colloquial and Civil Service Commission Interpreter levels. Ability to teach military/technical Polish especially with regard to RAF terminology.

QUALIFICATIONS Preferably a native speaker but consideration given to candidates holding a Degree in Slavonic and Eastern European Languages and a teaching qualification.

SALARY will be in accordance with the Scales for Teachers' in Establishments for Further Education, England & Wales, i.e. £2469-£4377 according to qualifications and experience, plus Supplements. A pensionable allowance of £582 p.a. will be paid for the slightly longer teaching year.

SUPERANNUATION The appointment will be superannuated under the Teachers' Superannuation Act and the successful candidate will be granted established civil servant status.

Application forms are obtainable from the Ministry of Defence, CM(S)4(L), Room 339 Lacon House, Theobalds Road, London, WC1X 8RY, quoting reference AW/1460 and completed forms should be returned no later than 2 January, 1978.

Colleges of Further Education

LOOKING FOR A JOB IN LIVERPOOL?

The National Association of Teachers in Further and Higher Education is in dispute with the Liverpool Education Authority over conditions of service in further education establishments.

NATFHE members considering taking an FE job in Liverpool are strongly advised to contact NATFHE first. Write to Negotiating Secretary, NATFHE, Hamilton House, Mabledon Place, London WC1H 9BH.

PRINCIPAL DESIGNATE (Group 6)

[illegible]

[illegible]

[illegible] College diversifies from the existing [illegible] of the present Ilkley and Bradford Colleges.

The Principal should have sufficient experience in Higher and Further Education to meet the challenges and demands of setting up a new College. The post requires proven managerial experience and capability. The new Principal should be capable of developing initiatives within the field of Higher Education and have an outstanding career record.

It is hoped that the new Principal will be in post as soon as possible and be available to participate in the planning stages.

Further details and application forms can be obtained from the Chief Further Education Officer, Provincial House, Tyrell Street, Bradford BD1 1NP. Applications should be returned to the above not later than 31st December, 1977.

City of Bradford Metropolitan Council

WEST GLAMORGAN County Council

Applications are invited from suitably qualified persons for the following post in the Authority's Further Education Service.

Swansea College of Further Education

HEAD OF DEPARTMENT OF SCIENCE AND MATHEMATICS (Grade 3)

Applicants should be graduates or equivalent with appropriate industrial, teaching and administrative experience.

Salary: £6,231 to £7,023 plus Supplements.

Application forms and further particulars are available from the undersigned, on receipt of a stamped, addressed, foolscap envelope, quoting post reference 1FSC/12.25.77.

CLOSING DATE: Closing date for the receipt of completed application forms is Thursday, December 22, 1977.

John Beale, Director of Education, Education Department, Princess House, Princess Way, SWANSEA.

Courses

BRADFORD COLLEGE

Diploma course in Early Childhood Education

Applications are now invited from qualified teachers with at least 5 years teaching experience, for this one year full-time in-service course commencing September, 1978.

Closing date is January 31, 1978.
For further details write immediately to:

The Admissions Officer,
Bradford College, Great Horton Road,
Bradford BD7 1AY
Telephone (0274) 34844

DIPLOMA OF ENGLISH STUDIES

Foreign students who passed the examination for the Certificate of Proficiency in December 1975 or earlier are eligible to take the June 1978 examination for the Diploma of English Studies conducted by the University of Cambridge Local Examinations Syndicate. The Diploma course involves study of Language and Literature to a level within the scope of the first part of a British university degree course in a second language.

Brookside College, Cambridge, is holding courses commencing in January, 1978, leading to the Diploma examination.

Apply to: The Vice-Principal, Brookside College, 3, Brookside, Cambridge.

SUMMER TEACHING?

BROOKSIDE COLLEGE

Cambridge

Will be holding a four-week course in the Teaching of English as a Foreign Language, commencing on 9th January, 1978. Certificate in T.E.F.L. for successful students.

Apply to: The Vice-Principal, 3 Brookside, Cambridge. Tel. Cambridge 64639.

Classified Advertisements
To advertise in the THES phone John Ladbrook 01-837 1234
THE TIMES Higher Education SUPPLEMENT
New Printing House Square, P.O. Box 7, Gray's Inn Road, London WC1X 8EZ

Colleges of Further Education continued

ilea

Principal

London College of Printing

Applications are invited for the post of Principal of this large specialist college covering a wide range of communication studies at all levels from operative to degree.

The areas of study covered include graphic design: photography, film and television; printing technology; business and general studies and journalism including radio journalism.

Applicants should be highly qualified and should have had experience in one or more of the areas of work mentioned above, together with administrative and academic experience at a very senior level.

The successful applicant will be asked to take up duties as soon as possible. The College is housed on two sites, the main premises at Elephant & Castle, SE1 6SB, and the annexe at Back Hill, Clerkenwell, EC1R 5EN.

Under the provisions of the Burnham (FE) Report the college is in group 7 and the fixed salary of the post of Principal is £10,827.00 plus supplement of £180.00 and London Allowance of £402.00. Further information and application forms (returnable by 9 January 1978) may be obtained from the Education Officer (EO/FHE4), Inner London Education Authority, The County Hall, London SE1 7PB.

INNER LONDON EDUCATION AUTHORITY

Administration

THE COLLEGE OF RADIOGRAPHERS

Education Officer

Applications are invited for the position of Education Officer to The College of Radiographers, a professional and educational organisation. Duties will include administration of professional examinations, servicing and advising the Boards of Examiners, the Education Committee and its sub-committees, arranging various professional courses and conferences. The person appointed will have an educational or professional radiographic background and good administrative ability. The salary is negotiable within the range £4,465-£5,599.

Full details and application forms (to be returned by 7th January, 1978) are available from The Secretary, The College of Radiographers, 14 Upper Wimpole Street, London, W1M 8BN.

SCOTTISH CERTIFICATE OF EDUCATION EXAMINATION BOARD

Applications are invited from the undernoted posts on the Board's permanent staff.

(1) RESEARCH AND DEVELOPMENT OFFICER
(2) ASSISTANT RESEARCH AND DEVELOPMENT OFFICER

Applicants should be graduates with a knowledge of research and statistical techniques in education and suitable experience in this field, a degree in Education will be an added qualification. The person appointed will be responsible to the Director and will undertake research and development work in the field of assessment. Salary scales, inclusive of supplements, are :—

Research and Development Officer
£6,415 - £6,583 - £6,751 - £6,925

Assistant Research and Development Officer
£3,975 - £4,095 - £4,214 - £4,343

(In this case a higher scale may be considered if justified by experience and qualifications.)
Forms of application and further particulars may be obtained from the Establishment Officer, Scottish Certificate of Education Examination Board, Ironmills Road, Dalkeith, Midlothian EH22 1BR, with whom applications must be lodged by Monday, 9 January, 1978.

ASTON IN BIRMINGHAM
THE UNIVERSITY
SENIOR ASSISTANT REGISTRAR

Applications are invited for the new post of Senior Assistant Registrar. The successful candidate will be responsible to the Registrar for co-ordinating sections of the Registry, dealing with liaison with industry and with communal and residential matters. Initially a major part of the duties of this post will be concerned with establishing administrative support services for matters relating to the University's liaison with industry, including acting as Secretary to a University Industrial Council. Candidates should preferably be graduates with extensive experience of University administration.

The salary will be within the range £6,115 to £7,681 per annum on the Administrative III scale.

Further details and application forms may be obtained from the Staff Officer, The University of Aston in Birmingham, Gosta Green, Birmingham B4 7ET, to be returned not later than 31st December, 1977. Please quote reference number 0/938. THES.

SOUTHERN REGIONAL COUNCIL FOR FURTHER EDUCATION
APPOINTMENT OF DEPUTY SECRETARY AND ASSISTANT SECRETARY

The staffing of the Secretariat of the Regional Council at Officer level is Secretary, Deputy Secretary and Assistant Secretary. The officers are assisted in their duties by administrative assistants together with secretarial support staff.

There is a vacancy for one officer to complete the complement of three. This vacancy is at either Deputy or Assistant Secretary level on the promotion of the former Deputy to the senior post and the temporary appointment of the present Assistant Secretary as Acting Deputy Secretary.

Applications are invited for each post and candidates should state for which post or posts they are applying.

Candidates should hold a degree or professional qualification or have had equivalent training together with experience of F.E. teaching or administration, including committee work.

The salary scales are: Deputy Secretary, £7,116 to £7,508 per annum (including supplements); Assistant Secretary, £4,759 to £5,363 per annum (including supplements).

Application forms and further information from the Secretary, S.R.C.F.E., 26 Bath Road, Reading RG1 6NT.

The closing date for the receipt of applications is 13th January, 1978.

Personal

POSTALOANS UNSECURED
£50 to £1,000
RICHMOND INVESTMENTS LTD, 4 The Green, Richmond, Surrey. 01-940 6858.

Awards

THE LEVERHULME TRUST
Research Awards 1978

The Leverhulme Trustees, through their Research Awards Advisory Committee, offer.—

(i) SENIOR STUDENTSHIPS

Up to six studentships to enable those who have left university for at least five years to return and study full-time at a United Kingdom university, preferably, but not necessarily, for a further degree.

Applicants must be first degree graduates of a United Kingdom university, holders of CNAA degrees or able to show evidence of equivalent education in the United Kingdom. They must not already have a post-graduate degree. They must have been educated at a school or schools in the United Kingdom or any other part of the Commonwealth. They must be over the age of 27 on 1st October in the year of the award.

The awards are available at £2,250 a year for one or two years. Two allowances may be paid at the discretion of the Committee. Firstly, a family allowance of not more than £1,250 a year depending on the candidate's circumstances and secondly, a contribution of not more than £500 a year towards the cost of university fees.

Candidates must be available for interview in London in March: travelling expenses within the United Kingdom will be refunded.

The closing date for applications (Form SS/2C) is 5th January, 1978. The period of the award will normally date from 1st October, 1978.

(ii) OVERSEAS STUDENTSHIPS

Up to six studentships for a period of advanced study or research in any subject at an institution of university or university college status in any part of the world other than the United Kingdom, Europe and the United States of America.

At the time of application candidates should be first degree graduates of a United Kingdom university, holders of CNAA degrees or able to show evidence of equivalent education in the United Kingdom. They should also have been educated at a school or schools in the United Kingdom or in any other part of the Commonwealth. They must be normally resident in the United Kingdom and under the age of 30 on 1st October in the year of the award.

Awards are calculated on a basis of an allowance of £1,600 a year for maintenance and fees, a return air passage, an outfit allowance and specific expenses associated with the course of study. Two further allowances may be paid at the discretion of the Committee. Firstly, a marriage allowance of £40 per month to a married student when accompanied by a dependent spouse, and secondly, to a student going to a country where the cost of living is excessively high.

The awards are tenable for one year or two years if circumstances warrant it. The awards may not normally be held in conjunction with other major awards. Students will be asked on termination of an award to make a short report to the Committee on their experience during the period of study.

Candidates must be available for interview in London in April: travelling expenses within the United Kingdom will be refunded. Successful candidates will be required to undergo a medical examination before confirmation of their awards.

The closing date for applications (Form O/2C) is 5th January, 1978. The period of the award will normally date from 1st October, 1978.

(iii) EUROPEAN STUDENTSHIPS

Up to eight studentships of £1,920 for one year for advanced study or research in a centre of learning in any European country other than the United Kingdom. Two further allowances may be paid at the discretion of the Committee. Firstly, a marriage allowance of £40 per month to a married student when accompanied by a dependent spouse, and secondly, to a student going to a country where the cost of living is excessively high.

At the time of application candidates should be first degree graduates of a United Kingdom university, holders of CNAA degrees or able to show evidence of equivalent education in the United Kingdom. They should also have been educated at a school or schools in the United Kingdom or in any other part of the Commonwealth. They must be normally resident in the United Kingdom and under the age of 30 on 1st October in the year of the award.

The studentships are tenable only at or in connection with a university, college or similar institution. They are not intended for students who are wishing only to improve their knowledge of modern languages; otherwise no subject of study will be excluded but preference will be given to candidates who intend to study in subjects normally grouped in the Arts and Social Studies Faculties of universities.

The period of the award normally begins on 1st October and students will be required on termination of the award to make a short report to the Committee on their experience during the year of study. The awards may not normally be held in conjunction with another major award.

Candidates must be available for interview in London in April; travelling expenses within the United Kingdom will be refunded.

The closing date for applications (Forms E/2C) is 5th January, 1978. The period of award will normally date from 1st October, 1978.

The results of application for the above awards will be communicated to the candidates in April 1978. Application forms and further information from The Secretary, Research Awards Advisory Committee, The Leverhulme Trust Fund, 15-19 New Fetter Lane, London EC4A 1NR. Telephone: 01-248 1910.

Colleges and Institutes of Higher Education

The Institute has recently become involved in a research project sponsored by a leading national company. In order to release the tutor leading the project to devote his time to this work we are now inviting applications from persons with suitable experience in Educational Technology for a

TEMPORARY LECTURESHIP

(GRADE II, BURNHAM F.E.)

Duties would include teaching in undergraduate programmes and the production of resource material.

Application forms and further particulars may be obtained by telephone or letter from the Director's Secretary, The Dome, Upper Bognor Road, Bognor Regis, West Sussex. (Tel: Bognor Regis 5581).

The closing date for applications will be 31st December, 1977.

West Sussex Institute of Higher Education
Director: J. F. Wyatt, MA

Research Posts

UNIVERSITY OF YORK

Department of Psychology

RESEARCH ASSISTANTSHIP

Applications are invited from graduates for the post of Research Assistant in the Department of Psychology from 1 February, 1977, for three years, to work on a physiological investigation of memory processes in pigeons.

Salary within Range IB of the scales for research staff, starting at £2,904 p.a. with USS.

Four copies of applications, stating qualifications and names of two referees, should be sent by 31 December, 1977, to the Registrar, University of York, Heslington, York, YO1 5DD. Informal enquiries can be made to Dr E. M. Macphail, Department of Psychology. Please quote reference number 6/7060.

OXFORD
THE UNIVERSITY
COMMITTEE FOR COMMONWEALTH STUDIES
APPOINTMENT OF RESEARCH OFFICER: DEVELOPMENT ECONOMICS

Applications are invited for the post of Research Officer in the Institute of Commonwealth Studies. The appointment will be for three years. The holder will be required to undertake approved research in the Institute under the direction of the Committee, and a limited amount of teaching and examining in the field of development economics.

The salary will be in the range of £3,075 (at age 27 and under) to £5,210 (at age 35 and over), with superannuation. It is hoped to fill the post with effect from 1 April 1978 or as soon as possible thereafter.

Application forms, to be submitted by 11 January 1978, are available from the Secretary, Institute of Commonwealth Studies, Queen Elizabeth House, 21 St. Giles, Oxford OX1 3LA.

Librarians

BIRMINGHAM
THE UNIVERSITY OF ASTON
DEPUTY LIBRARIAN

Applications are invited from suitably qualified candidates for the post of Deputy University Librarian. Candidates should be of graduate level, have a qualification in librarianship and experience of university library work at a senior level. Candidates should also be able to demonstrate competence in staff administration and have experience in current developments in librarianship, preferably in the field of computer-based library services.

The salary will be within the Senior Library Staff Grade III scale (£6,143 to £7,981 per annum).

Application forms and further particulars may be obtained from the Staff Officer, The University of Aston in Birmingham, Gosta Green, Birmingham B4 7ET, quoting reference number 0/941 THES. Forms should be returned not later than one month after the appearance of this advertisement.

DURHAM
THE UNIVERSITY
ASSISTANT LIBRARIAN
in the SCIENCE SECTION

Should have good honours degree, preferably in Physical Sciences; professional qualifications Librarianship-Information Science and/or relevant experience. Salary on national scale IA (£3,333-£5,127) with possible extension to IIB.

Further particulars from the Librarian, University Library, Palace Green, Durham, to whom applications together with names of three referees should be sent to arrive not later than 3rd January, 1978.

Classified Advertisements
To advertise in The THES phone Lorraine Williams 01-837 1234 Extn 575
THE TIMES Higher Education SUPPLEMENT
New Printing House Square, P.O. Box 7 Gray's Inn Road, London WC1X 8EZ

Colleges and Institutes of Higher Education

LONDON EHE

Ealing College of Higher Education

HEAD OF SCHOOL OF LIBRARIANSHIP

(Grade IV)

Applications are invited from librarians with substantial librarianship degree teaching, professional library experience and proven managerial ability for the above post which becomes vacant upon the retirement of the present Head.

The School is about to submit a BA degree in Library Studies to CNAA and teaches the following courses, Parts I and II General Professional Examination of the Library Association, Post-graduate course leading to ALA as well as short courses. The appointee will be expected to inspire and sustain the further development of the School, which should include a growing commitment to research and consultancy.

Salary, Burnham Head of Department salary scale will apply, £7,650 to £8,526 p.a. inclusive of London Weighting and Salary supplements.

Full details from the Chief Administrative Officer (TD/UC), Ealing College of Higher Education, St. Mary's Road, London W5 5RF.

Closing date December 16, 1977.

BUCKINGHAMSHIRE
COUNTY COUNCIL EDUCATION DEPARTMENT
BUCKINGHAMSHIRE COLLEGE OF HIGHER EDUCATION
Queen Alexandra Road, High Wycombe, Buckinghamshire
Director: D. I. Everett, B.A., F.C.T.Com.

SCHOOL OF MANAGEMENT STUDIES AND LANGUAGES
Head of School: P. H. Mopford, M.A.

Applications are invited for the following posts, duties to commence as soon as possible; appointments will in the first instance be for one year but may be renewable.

SENIOR LECTURER IN QUANTITATIVE MANAGEMENT

Applicants should hold graduate and/or professional qualifications, together with appropriate industrial and teaching experience.

SENIOR LECTURER IN FINANCE AND BUSINESS POLICY

Applicants should be graduates and/or qualified accountants and have relevant industrial or teaching experience.

Salary Scales: £5,523-£6,447 per annum.

Further details and application forms for these posts are available from the Assistant Director, Buckinghamshire College of Higher Education. Telephone: High Wycombe 22141.

KENT
CHRIST CHURCH COLLEGE
Canterbury

Applications are invited for the following post with effect from the Summer or Autumn Term 1978.

LECTURER in LANGUAGE STUDIES with particular reference to the teaching of English as a Foreign Language. The tutor will be responsible for a Diploma course in the teaching of English as a Foreign Language. If possible the tutor should also be able to contribute to curriculum courses in Language in Education for B.Ed. students, or alternatively to the Modern Languages Method Course for the Post-graduate Certificate in Education course. The salary will be in accordance with the scale £3,279 to £5,403 (Lecturer II) or £6,051 to £6,417 (Senior Lecturer) plus supplementary payments.

Further particulars from the Principal's secretary, Christ Church College, Canterbury, to whom applications should be returned by 12th January.

General Vacancies

Sales executive with grit

You are:

- in your late twenties
- used to dealing directly or indirectly with administrative problems in a university, polytechnic or institute of higher education
- perhaps involved with education publicity
- positively interested in joining a progressive, specialist company which produces prospectuses, among other things.

We are:

- one of the foremost producers of education publicity with an established reputation
- searching for a professional to take charge of our education division within a year or less
- prepared to invest in training and proper support to do the job, as you would expect.

We are offering an excellent starting salary, a worthwhile bonus not commission, a good company car, four weeks' holiday and a pension scheme as the basic rewards package.

You will have to offer drive and enthusiasm but these will be in evidence already from your progress to date.

Send a well detailed account of your career pattern and range of responsibilities, saying specifically why you want this vacancy, to

T John Foster
Marketing & sales director
Hoords Group
[illegible]

HOME-BASED TUTORS

Part-time TUTORS working at home with a specialist knowledge of West Africa are required to coach students by post in various West African G.C.E. and Professional subjects.

Write for application form to the Senior Tutor, The Rapid Results College, Tuition House, London SW19 4DS.

NOTTINGHAM
MEDICAL RESEARCH COUNCIL
INSTITUTE OF HEARING RESEARCH
EPIDEMIOLOGIST/STATISTICIAN

Applications are invited for an appointment to the scientific staff of the Institute of Hearing Research. The headquarters are in the Medical School, University of Nottingham, but this appointment may be located in one of the Institute's hospital outstations and some regular travel will also be involved. Applicants should have a firm academic background in statistical theory and some experience of its applications in medicine. Experience of computerised record systems would be an advantage. The post will involve collaborating with clinicians investigating the etiology and management of hearing impairment and deafness, and collaborating with psychoacousticians and audiologists in establishing the incidence of various configurations and severities of impairment. In addition, advice will be required by other members of the Institute staff on mathematical and statistical models and on statistical tests.

The appointment will be on the Grade I or Grade II scale for scientific staff (£3,761-£5,219 or £5,423-£6,665) according to qualifications, age and experience. If aged under 27, the contract will be for three years; older recruits could be appointed for five years in the first instance with the possibility of tenure later. In exceptional circumstances a more senior scientific appointment of unlimited duration may be considered immediately.

Further details are available from Dr. M. P. Haggard, IHR, Medical School, University of Nottingham, to whom applications should be sent by 16th January, 1978.

THE ASSOCIATED EXAMINING BOARD
for the General Certificate of Education
Wellington House, Aldershot, Hampshire, GU11 1BQ

Applications are invited for the post of

CHIEF EXAMINER in History of Art

at Advanced Level for the 1978 examination for the following Papers/Options :—
Paper 1, Option 04 Neoclassicism, the Romantic Movement and Realism.
Paper 1, Option 05, Modern Art and its Origins.
Paper 2.
Duties will commence immediately an appointment is made.
If necessary, separate appointments may be made for each paper and each Option. Therefore, applicants should state quite clearly under what conditions they would be prepared to accept an appointment.
All applicants must be graduate Art Historians with considerable teaching and examining experience at Advanced Level or above. Further particulars and application forms are obtainable directly from the Secretary (A10) at the above address, to whom completed applications should be returned within 14 days of the appearance of this advertisement.

Overseas

FOOTSCRAY INSTITUTE OF TECHNOLOGY
Ballarat Road, Footscray, 3011, Victoria, Australia

A College of Advanced Education affiliated with the Victoria Institute of Colleges.

The Institute is located approximately six kilometres from the centre of Melbourne and is the only tertiary college serving the rapidly expanding western region. The Tertiary Division of the Institute currently offers degree and diploma courses in the areas of Arts (Urban Studies), Applied Science (Chemistry, Mathematics), Business (Accounting, Catering and Hotel Management, E.D.P., Secretarial and Tourism), Engineering (Civil, Electrical and Mechanical), Social Science (Physical Education and Recreation Leadership). The T.A.F.E. Division offers a range of trade, middle level and tertiary orientation courses.

Vacancy for Assistant Director

A challenging position is available for an energetic, enthusiastic and suitably qualified person to be appointed as Assistant Director.

The vacancy will occur in 1978 due to the pending retirement of the present incumbent who was appointed to the position at the beginning of 1970.

Applicants must have had extensive educational or industrial administrative experience and should possess a higher degree in a discipline related to the educational objectives of the Institute.

Salary : $A31,189 per annum

Further particulars including a schedule of duties may be obtained on application to the Registrar.

Applications accompanied by a recent photograph together with the names of three referees should be forwarded to the Director, Footscray Institute of Technology, P.O. Box 64, Footscray, Vic. 3011.

The closing date for receipt of applications is 3rd February, 1978.

EXCERPTA MEDICA

provides an international biomedical information service based on a computer database increasing annually by 250,000 items. Most editorial work is carried out by part-time medical specialists working in Amsterdam.

EXECUTIVE EDITORS

are required for the Headquarters in Amsterdam to help manage the production of the database, to provide assistance to users and to participate in user training.

Applicants should have at least :
— a good honours degree or equivalent formal qualification
— five years' experience of either research or information/editorial work relevant to the biomedical sciences.

The posts should be attractive to research scientists wishing to move to scientific administrative work. An excellent command of English is necessary and additional languages are desirable.

E M is a unit of Elsevier Scientific Division and offers a competitive salary with good secondary conditions of employment. Every assistance, including expenses, will be given for relocation in the Netherlands.

Further details and application forms may be obtained from:
Dr G. A. Somerfield, Excerpta Medica, Keizersgracht 305, Amsterdam, The Netherlands.
Closing date for applications: January 10th, 1978.

ELSEVIER

THE NEW SOUTH WALES INSTITUTE OF TECHNOLOGY

SYDNEY, AUSTRALIA

The New South Wales Institute of Technology is a corporate institution established to provide a wide range of professional courses for those entering or already employed in industry, government and technological fields.

The Faculty of Business Studies currently offers a Bachelor of Business degree with concentrations in accounting, marketing, operations management and public administration. In addition, in 1977 the Graduate Diploma in Accounting and the Graduate Diploma in Personnel Management/Industrial Relations were introduced and it is anticipated that expansion of graduate courses will proceed in the near future.

Total current enrolment within the Faculty approximates 2,600 students. Administratively the Faculty is organised into four Schools: Business and Public Administration; Finance and Economics; Marketing; and Accounting. Applications are now invited for the following senior academic positions within the Faculty of Business Studies

HEAD, SCHOOL OF BUSINESS & PUBLIC ADMINISTRATION

The School of Business and Public Administration currently offers undergraduates fields of concentration in operations management and public administration in the Bachelor of Business Course.

The position of Head of School carries with it the responsibility for the academic leadership of the staff of the School and the day-to-day operation of the instructional and research work. As Head of School the appointee will be, ex-officio, a member of the Academic Board and the Faculty Board and may be called upon, in the future, to assume the duties of the Dean of the Faculty.

Applicants should possess post-graduate qualifications in Business Studies and should have lecturing and/or administering experience at an appropriate level in higher education in the Business Studies field. Candidates with practical experience in business, government, or consulting will be given preference.

HEAD, SCHOOL OF FINANCE & ECONOMICS

The School anticipates offering an area of concentration within the Bachelor of Business degree in Applied Economics. Further, a Graduate Diploma in Finance is being planned for introduction in the near future. The School will further be offering Finance and Economic subjects in other Graduate courses that are being offered within the Faculty of Business Studies.

The appointee should posses a doctorate (or equivalent) and should have professional experience at an appropriate level in higher education in the Business Studies field. This experience will have been obtained by lecturing and/or administering in a Faculty of Business Studies at a recognised University or Polytechnic.

It is desirable that the Head of the School will have had substantial business experience. Alternatively, the appointee may have served as a consultant to business or to government.

The position of Head of School carries with it the responsibility for the academic leadership of the staff of the School and the day-to-day operation of the instructional and research work. As Head of School the appointee will be, ex-officio, a member of the Academic Board and the Faculty Board and may be called upon, in the future, to assume the duties of the Dean of the Faculty.

ASSOCIATE HEAD, SCHOOL OF ACCOUNTING

The School of Accounting provides under-graduate education for persons seeking vocation skills in accounting and finance careers, through a broadly based business degree with a strong core of accounting and finance. It also provides graduate programs for mid-career functional managers who are seeking to upgrade and update their existing skills. Further development of Faculty graduate work will involve the School in general management programs. Three broad disciplinary areas are presently identified—Financial Accounting and Auditing, Management Accounting and Systems, and Business Law. The School is among the largest accounting schools in the State and makes a significant contribution to tertiary education in this city.

The Associate Head will provide academic leadership in one of the accounting disciplinary areas, and will accept significant responsibility for decentralised administration in defined activities congruent with the overall policy of the School.

Applicants should have appropriate academic qualifications, and experience and accomplishment both in administration and tertiary teaching at a senior level.

The successful applicants will be appointed on one of the following salary levels: $A28,669; $A29,728; $A30,786.

The Council of the Institute permits academic staff to undertake limited professional consulting for industry and commerce. These positions carry tenure and provide for superannuation, long service leave, and a housing loan scheme. Fares and a contribution toward removal and initial accommodation expenses are provided for overseas appointees. A Study Leave scheme is also available.

Applications close on February 17, 1977. Applicants should arrange for three confidential referees' reports to arrive by the same date. Written applications should include address, telephone number, personal particulars, documentary evidence of qualifications, work and teaching experience, affiliations, publications, research work undertaken, and the names and addresses of the referees contacted. Further information may be obtained from, and applications and referees' reports are to be sent to:

The Agent-General for New South Wales,
N.S.W. Government Offices, 66 The Strand,
LONDON, WC2N 5LZ, ENGLAND.